



# Enhancing user experience with a Wordpress website: a case study of a yoga center

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## **Enhancing user experience with a Word- press website: a case study of a yoga center**

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This bachelor's thesis report provides a complete instruction for creating a user-friendly website based on the Wordpress Content Management System, with information about how to maintain the effectiveness of the website. In addition, the report presents the result of the project, which is a website for the Yoga Studio Five center, the client.

With the development of the health and fitness industry, more and more private companies and small organizations are building their own gyms, as well as yoga centers. At present, customers require a good platform to explore the services offered by those centers, helping them to decide on buying membership. As a result, a website is essential for the development of the centers.

In this thesis, the Agile method was used as a guideline for the process. After completion, each module and part of the website are delivered to the customer to test and confirm. The final step was to gather all the finished parts to build a fully functional website.

Once the client has access to the new website, he/she can update information about the center, and also in the future, when they decide to expand their business, they will be able to create a website following the instructions in this thesis report.

Search engine optimization (SEO) will also be focused when developing the website, due to the fact that the competition in fitness industry is increasing dramatically, a good SEO website can be stand out whenever customer makes a search.

The thesis utilises data collected using both qualitative and quantitative methods. Interviewing with the IT manager and deputy director of the center was mainly focused to obtain the most important information, while secondary data including books, online sources, statistics, other websites for benchmarking and the author's knowledge will be used to support the thesis.

Finally, the whole website will be tested locally before packing and sending to the client. First users and staff will evaluate the efficiency of the website. Once received, the client can create an account to have full access to the website.

Keywords: Wordpress, CMS, Yoga, Agile, SDLC, SEO

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## 1 Introduction

According to a market research by Q&Me in Vietnam in early 2018 with more than 850 participants in two major cities, Vietnamese people are having a tendency towards their health and shape much more significant compared to 5 years ago. 54% of the participants choose to exercise for maintaining health and physical strength, with more than 80% male and 73% female frequently go to a fitness center instead of doing self-workout at home.

As the demand for health and fitness services increases, Tinh Do Tam Co., Ltd seized the opportunity and opened Yoga Studio Five center in the heart of capital city, Hanoi. The center was attracted by many surrounding resident people, as well as other yogis in the city. While the marketing strategy of Yoga Studio Five is mainly traditional and by running advertisements on social networks, however, a new modern website presence is ideal for the center to expand their business and as a result, the company was looking for a website builder to finalize their project.

Websites nowadays play an imperative role in any organization and company, become a prior business tool to connect customer with their services. Uncomplicated accessibility with simple management of a website will not only be convenient for its developer but save more time and costs for the company, especially for small and medium enterprises with tight budget. Coombs (2018) points out some suggestions to market a fitness center, and the first and foremost consideration is creating a responsive friendly website. He also mentions about several digital tools that can be used to fulfil these requirements, and one of those is Wordpress, which will be implemented in this project.

### 1.1 About the yoga center

Yoga Studio Five center (Yoga Studio5) was established by Tinh Do Tam Co., Ltd in early 2016, located in the middle of the old quarters of Hanoi, capital city of Vietnam. Next to office buildings, entertainment and education centers, Studio Five represents a totally different atmosphere with a meditative quiet space without heavy machines and equipment. Customers can find themselves a fresh scene and seeing friendly smiles so that they can open a new journey with yoga in their busy lives.

There are many other small and mid-sized Yoga centers in Hanoi, but they are usually set in a fitness complex with gym and other sport areas. Yoga Studio5, however, was developed for yoga practice only, with professional yoga teachers from Indian and complete facilities. They offer more than 20 types of yoga, some of them are first arrivals to Vietnam.

With a higher demand for doing yoga exercise during summer time, the center's board decided to launch a new marketing campaign as well as expanding more classes. Front-desk

staff keep updating the promos and contacting potential customer via multiple sources. As a result, a user-friendly built website with simple web content management system is required to avoid complicated training for the staff and help them get use to the new communication platform faster.

## 1.2 About the project

The project has two main purposes: creating a website for Yoga Studio5 and documenting all those processes to save as a fundamental guideline of building a simple website. Since the center's customer are mainly foreigner, the website needs to be created in English with clear content and design.

### Studio5 website project



Figure 1: Website project gantt chart

The project will be implemented semi-remote with primary data collected by author. Any updates are discussed by email between the client, author and supervisor. As shown in the gantt chart, the whole project is supposed to finish in August.

There exists several limitations and risks in the project that the author has to pay more attention to. Time consuming is considered firstly because if the project requires more time than expected, the center might lose summer events marketing on the website and therefore, a number of potential customers cannot approach to that advertisement. Moreover, since the project is implementing in the summer, the author has limited access to university's library and also face possible delay from responses due to summer vacation. Personal inexperience in a professional project is a minor threat to the project as well. Overall, the success of the project depends on the precise preparation of the author along with a clear time management, which will be presented in chapters below.

## 2 Research and development methods

Research always contributes largely to the thrive of a project; therefore, a proper research method will lead the project to its most success. As stated by Dawson (2009), research is the expanding knowledge with series of systematic activities that have not done before. Dawson (2009) also mentioned a valuable factor in every research, theory. In this project, several theories will be applied to support the idea of making a website and its operation.

According to Prljic (2014), doing a quick research with client primarily when working on a website project gathers a general overview about the site and the pages. After that, a longer and deeper research can show to developer the project scope in order to concentrate on exact requirements from client. Selecting an appropriate research methodology for the project will not only save a huge amount of time, but also maximize the results delivered to the customer.

### 2.1 Software Development Life Cycle

Software Development Life Cycle (SDLC) is a process following a software project, which includes a detailed plan on how to develop, maintain, make change or upgrade a specific software (Swersky, 2018).

In any software project, process is an essential factor to bring up success to developers. It supports every member in the team to have an insight and to keep informed about the project. In fact, developers and software manufactures adjust the stages in a process depends on the actual demands of the project. Nevertheless, creating a software product in general needs to go through these 5 principal phases, as shown in Figure 2:

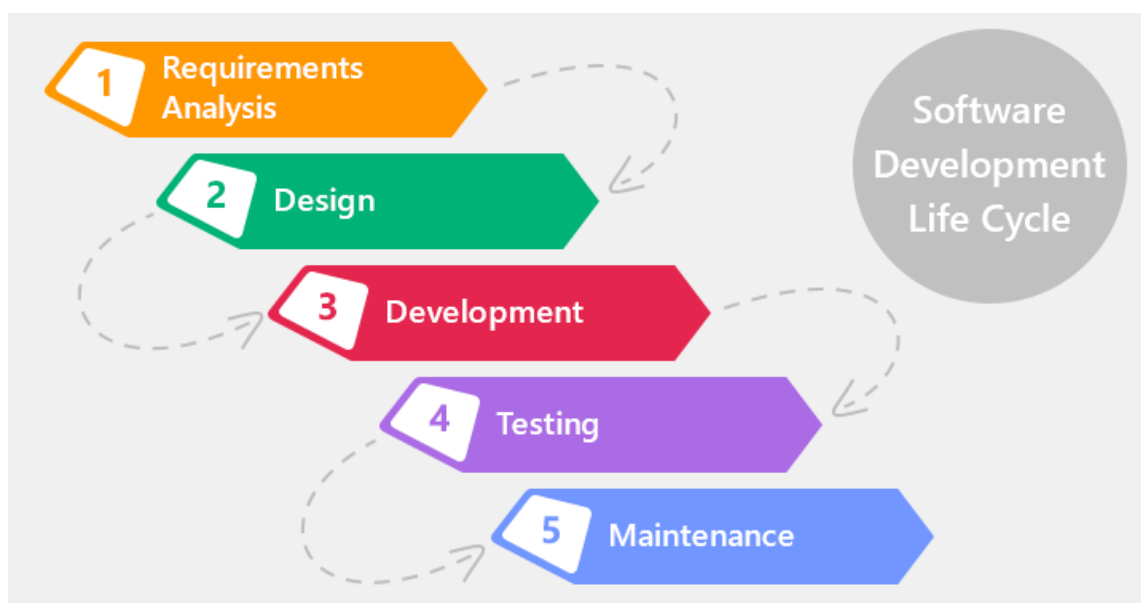


Figure 2: Software Development Life Cycle phases



- 1) Requirements analysis: in this phase, developers or analyser get into communication with clients to clarify what they need for their software product. This phase is important to the whole development; therefore, it should be carried out by experienced people so that they can gather exact information from client. Hence, the client's requests will be analysed for later use and testing.
- 2) Design: based on the analysed documents, design department will generally create a visual design of the product. In this website project, client will be given a website layout framework with sample menu and structure so that they can figure out the overall appearance of the website. Only after having an agreement from both sides, the project moves to the next phases.
- 3) Development: developers will start to build the product in this phase. It is the realization of functions of the product after the first prototype in design phase. For a software product, this phase can also be called "coding-phase". Building a website based on Wordpress is similar to coding in a software project in this phase.
- 4) Testing: in this phase, tester will be assigned to test functions of the product. The testing phase will be relied on criterions that the product needs to go through to be approved for the final release. Reports are highly necessary in this phase to record about bugs, errors and given back to development team for improvements. If the product passes this phase, it will be tested again on customer's environment.
- 5) Maintenance: After delivery, the product needs to be maintained to make sure that all the functions are on track. During operation, clients are supported to fix probable errors, meanwhile, they are also updated with newer versions of the software to meet the new demands or adapt to new environments.

There are many software development methodologies come after SDLC. Each model conforms to stages specialized for its type to accomplish the whole development. Some most popular methodologies are: Waterfall, V-model, Spiral model and Agile.

In this project, due to time limit and possible changes from client, the author chose Agile to apply for the web development. Although there are some drawbacks by using that methodology, the author believe that it will deliver the most successful product while minimalizing the risks that might shift the whole project to a wrong destination.

## 2.2 Agile

### 2.2.1 What are Lean principles and Agile methodology?

As mentioned by Fair (2012), the definition of Lean principle is the concentration towards tasks and activities so as to recognize opportunities for enhancement. By accomplishing this

analysis and focusing on specific areas, the efficiency of the project is increased and as a result, a higher quality product is inevitable.

Fair's opinions about activities in a project that should be changed to eliminate the "waste" and focus on the main things: stop irrelevant things that don't contribute to building product and pay more attention to "customer and business value added work". To clarify, a team needs to change their traditional mindsets, which normally are unnecessary meetings and tasks, or doing unvalued activities set by the managers. All of these will suffer the whole work and delay the progress.

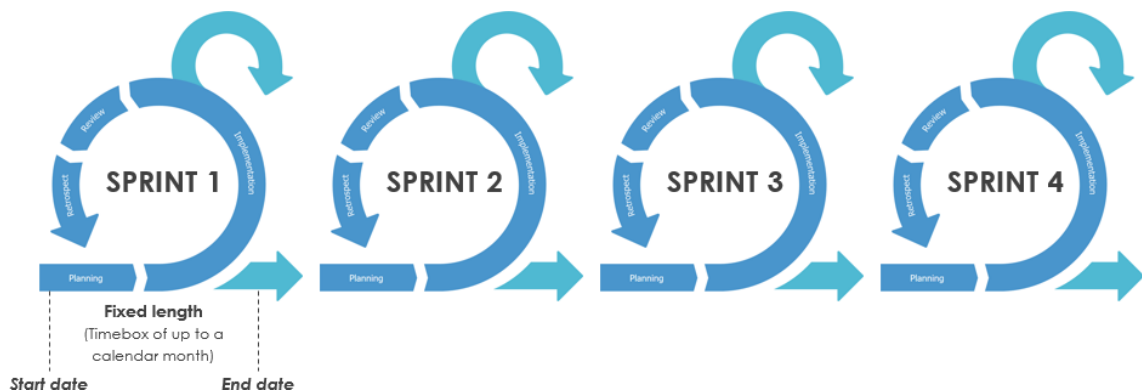


Figure 3: Agile sprint planning

Agile methodology is a project methodology following Lean principles (Fair, 2012). This method represents a flexible software development method that separates the process into sprints (Figure 3). The duration for each sprint is delineated with a list of doing tasks, deliverables, testing. Once the expected results are not satisfied, the work is revised and modified into new sprint planning (Mary, 2018).

The most obvious benefit gained from this method is product delivery time. When each sprint is completed, the work can be reviewed by the project team as well as the client. Therefore, Agile methodology requires a high involvement and collaboration from customers. They can have an early approach to a product that can fulfil their basic needs, thus keeping the deal between developer and the client in a good condition. Besides, Agile provides highest transparency. With the presence of customer in the entire process, they can see a more realistic progress of the project, from planning to review sessions.

Agile is a powerful tool for development when it comes to improving quality and adapting to new changes. By testing and fixing defects so quickly in each cycle, Agile increases the overall quality of the final product (Segue Technologies, 2015). Furthermore, another advantage of using Agile, which can be considered as its "signature", is the ability to familiarize with new modifications. Changes are always possibly happened in any project. In Agile, new sprints

can be planned for next iterations and hence changes can be made without affecting severely the entire project.

Of course, there are some disadvantages when applying Agile methodology. For example, a project using Agile method without the cooperation with customer if they don't have time to involve might lead to unhappy results. In addition, Mary (2018) suggested that due to iterative characteristic of Agile, the project might have a frequent refactoring that can impair the overall quality. However, this is more common in large-size project that need more integrations.

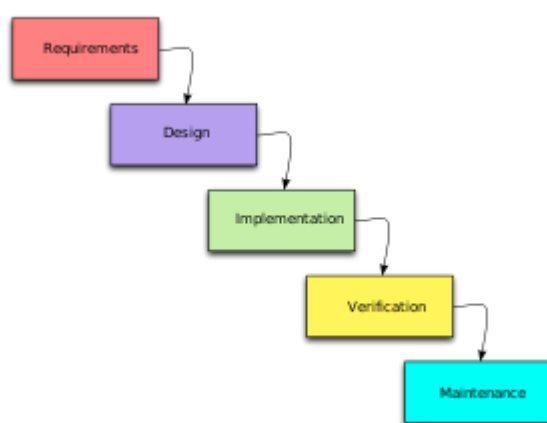


Figure 4: Waterfall model

cost and difficulties are unavoidable for changes. On the contrary, flexible development method like Agile will release product much sooner with usable functions and continue upgrading the product before running a full test.

Overall, choosing an appropriate method for a project is not a simple decision. The author believes that Agile methodology will fit in this web project, and the following reasons will explain why applying Agile is the right answer.

### 2.2.2 Applying Agile model to the project

The most important reason why the author can apply Agile to this web development project is a great relationship with the client and the manager of IT department. By having an excellent collaboration in this project, the author was getting plenty of support with details about requirements, layout, pictures, menus and even statistics. The IT manager was also very enthusiastic and responsive with testing and simulating trial versions of the web. Feedbacks and corrections are planned immediately after and always welcomed.

Secondly, by using Agile method, the author can alter to new changes depends on the events of the yoga center. For example, a home page with class schedules and event introductions

Compare with Waterfall model (Figure 4), a very popular methodology that is still being widely used, both have some similarities, which is going through SDLC. However, the rigidity of Waterfall methodology is obvious, when all the phases are distinct, and it is only able to move to next phase once the previous phase is finished. As a consequence, high

usually need to be up-to-date, sometimes even with newer pictures. It is simpler to roll back for editing home page without suffering other parts of the project.

Finally, as aforementioned, the yoga center can receive a working website on local host much sooner, therefore they can present to the company and ask for further feedbacks and ideas. Basically, the project development process is divided into “to do, in progress and done” to monitor and have an overall look on its progress. There are 4 main sprints that will be carried out to make up the project (Figure 6); after each sprint is finished, the client will confirm about its usability, functions and indicate changes if needed. In this way, the client can have a usable temporary website much faster.



Figure 5: Project monitoring

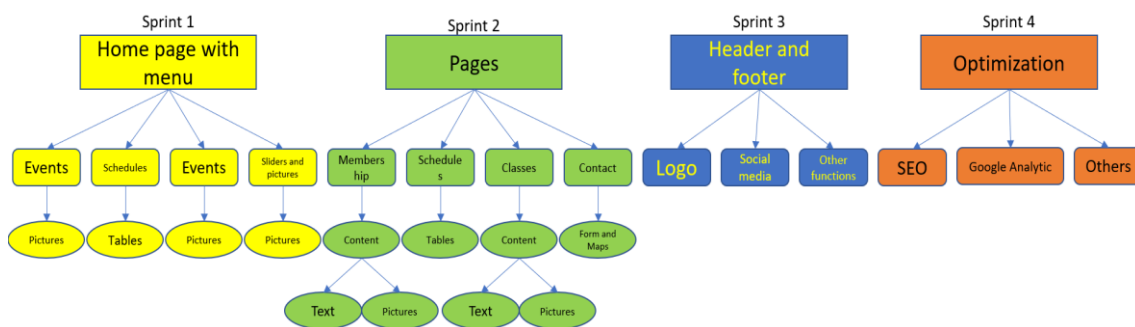


Figure 6: Applying Agile to the website project

After presenting the final version to the client, the project will be transferred to the IT manager of the center. Once the evaluation is completed, the IT manager will decide when to go live, ending the project.

## 2.3 Information gathering

Prljic (2014) recommends several useful ways to collect data from the client. For a web project, conducting a proper and sufficient research about the client and their business provides general as well as particular views about the exact requirements. Applying both qualitative and quantitative methods to gather information is necessary for this project because numerical data is presented for evaluating the efficiency of the website, while interviews collect deep information from the client.

### 2.3.1 Qualitative method

In qualitative research, Blue Fountain Media (2019) suggested that having a conversation with client’s CMO, CEO and members of other departments will clarify their requirements. One of the most popular method used in qualitative research is interview. It can be implemented

during in several phases of the project, but commonly be used in the first stage of a software development project to assemble information. In general, there are two types of doing an interview, by a structured or unstructured way. While structured interviews are set up with prepared questions for interviewees to answer, unstructured interviews tend to achieve a wider range of information with open-ended questions. Both of these types of interviews have their own values, therefore, a combination interview will get the most beneficial outcomes (Dawson 2011, 27).

Fortunately, the author was able to have a conversational interview with Yoga Studio5 center throughout a face-to-face meeting during the time in Vietnam. All departments supportively contributed to the meeting and as a result, the author gained remarkable insights about the center's operation and business. As a service provider, the website project aims to increase reputation of the yoga center, targeting exact customer segments that might approach and brings high values to the company. Referring to this campaign, the company outlined a plan for marketing and sales departments, and website acts as a tool to present their new events to customer. The meeting was held in the yoga center and documented by the author, which will be attached in appendix of this thesis.

### 2.3.2 Quantitative method

In fact, businesses are usually impressed by researches which involve in statistics. With a highly competitive market in health and sport industry, there is no doubt that statistical evidences can impact significantly to key decisions. The ideal solution here for the author to garner concrete data is by spreading surveys. By doing that, all participants of the meeting can vote for their ideas and opinions, which results in a better consolidation of the website project. The survey was given twice, with a quick one during the first meeting and after the website is complete to receive feedbacks.

The first survey demonstrates a common thought of people working in the center about how a yoga website should have. In our tech-driven world, it is evident that almost everyone has access to the internet with a hand device. Some key factors that people tend to consider when finding a sport center are prices, facilities and location. People also look for tips and high-quality posts relating to health, exercises and diet. An excellent website needs to illustrate all those advantages clearly to its visitors, ideally with responsive design for the nicest appearance in any device. There were 20 people took part in the quick survey, and the result can be seen in Figure 7:

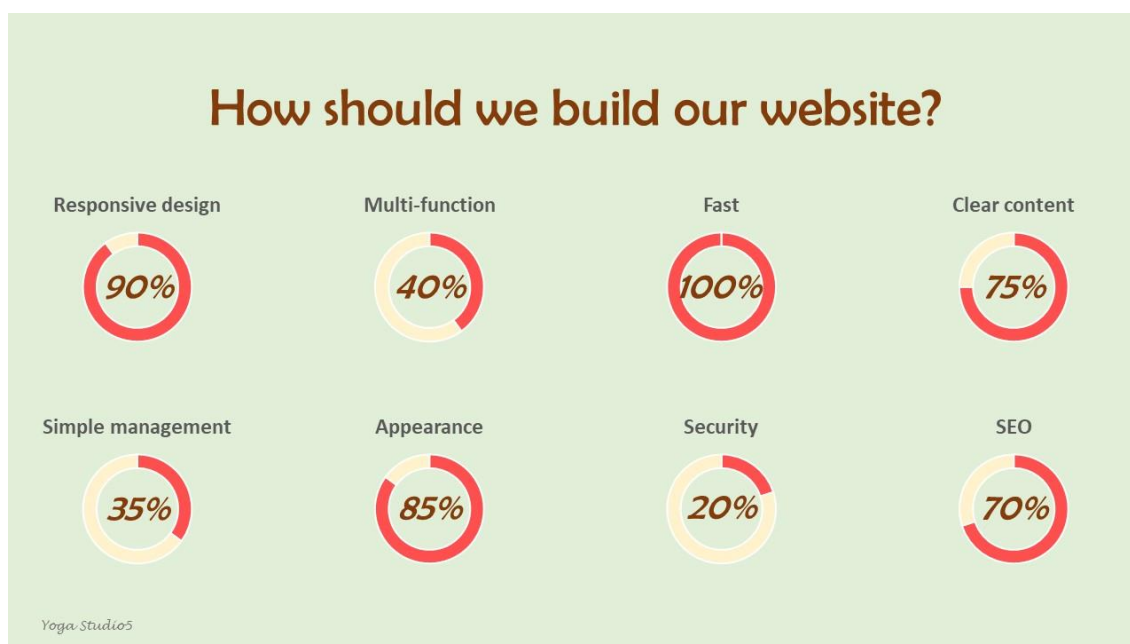


Figure 7: First survey result

As expected, the result represents that essential factors of a website have higher votes than others, which author needs to give more attention to. On the other hand, other aspects still contribute a certain usefulness in a website such as security and for this reason, they will not be rejected in the project.

In addition, the author received many useful data and assistances from other departments, especially sales departments. Statistics about existing membership situation and classes are summarized in the table below:

Content	Number
Active member	225
New member per month, approximately	21
New member per day, approximately	1
Classes per week	38

Table 1: Yoga center's current situation

The website project's main result is obviously to increase the number of people coming to the yoga center and purchase membership, which can be comparable to the old statistics. More classes opening in the future is also a good sign for the development of the center. Finally,

Google Analytic which is embedded in the site will deliver and measure even more valuable data about online visitors later on.

### 3 Theoretical frameworks

In this section, theories and definitions are given to support the development and analysis of the project. These frameworks are presented in chronological order which create a connection between each other.

#### 3.1 Importance of website to fitness industry

In the present, investing in health and sport services is a very popular habit. Regardless of age, people tend to choose a suitable type of sport for themselves to maintain in a long run. Nonetheless, to attain an optimal result by doing exercise, a sporty environment and facilities should also be considerable. Not everyone has free time to explore precisely each center nowadays. For this reason, website is the most convenient way to connect customer to centers, instead of driving around finding prices and other concerns. Pictures and complete information can be easily accessible anywhere by customer through a website.

As maintained by Son (2019), Vietnamese people today become more conscious of health and body composition, leading to a big growth in fitness industry. The report stated that California Fitness and Yoga, one of the biggest fitness chains in Vietnam, achieved a revenue of \$12.85 million in 2018, which is 60% higher than 2 years before. Other small and medium sized center are appearing rapidly in many cities. In particular, Yoga became an immensely favoured training in Vietnam, after the first International Yoga Day on June 21<sup>st</sup>, 2015.

With a fierce competition market as that, being outstanding from others requires many competitive advantages. Making differences from competitors in every aspect, from quality to marketing campaigns are the answers. While social medias are vital to the survival of a center, a linked website can extend networking through articles in blogs, attracting more audiences. Compared to social media's platforms, it can be seen clearly that website has a more straightforward interface to look for information and services offering. More importantly, owning a site as an online brand will reflect the center's authority and services. This could be proven by the fact that a survey was conducted by National Association of Health and Fitness and 80% of respondents said they found their gym through Google Search (PPLAdmin, 2018). Therefore, maintaining a good reputation online is as important as physical appearance.

Sowards (2016) refers some other benefits of a website for small and medium sized organizations. A website provides 24/7 accessibility to customers, therefore followed by many advantages such as saving cost, building reliability, enlarging customer resources and improving customer service.

### 3.2 Wordpress as a CMS

As we can see in any website, there are plenty of parts arranged systematically to create a visual appearance that user can interact with it. In order to manage all of that content effectively, Content Management System (CMS) was born. According to Jones and Farrington (2011, 5), CMS is a software to assist authors in publishing and handling their content online. CMS can separate content management from coding and other technical aspects by granting different permissions between admins and editors and thus, making the website operate much more efficiently. There are many types of CMS (W-CMS, E-CMS, T-CMS) having similar functions such as media managements, text editing and interface customization. Streulli (2017) listed some evident benefits when using a CMS:

- 1) Higher efficiency: content creation is simpler because no programming or coding is needed. This will save more time and cost while making updates faster.
- 2) Improving position in search engines: with higher-quality content and regular updates, the website can attract more interactions from users, gaining a higher position whenever it is searched. Beyond that, there are many plugins with just one-click installation on many CMSs that support Search Engine Optimization (SEO). Websites with SEO are always ranked first pages in search engines and have more visitors.
- 3) Mobile devices compatibility: Web Content Management System can provide appropriate interface to user depends on their browsing devices. In this way, users will have a better experience when reading and searching in the website.

Wordpress was first created in 2003 by two developers, Matt Mullenweg and Mike Little. Wordpress is an Open Source Software with php website programming language and MySQL database. As one of the first tool to help user create their own blogs, Wordpress was widely accepted with its simplicity and



Figure 8: Wordpress logo

useful functions. Overtime, the number of users, freelances and developers increases, making Wordpress become the most famous CMS in the world. Not only blogs, Wordpress is now used to create more than 27% of all websites, even with highly complex structure for e-commerce, hotel booking, car rental, real estate and so on.

	2010 1 Jan	2011 1 Jan	2012 1 Jan	2013 1 Jan	2014 1 Jan	2015 1 Jan	2016 1 Jan	2017 1 Jan	2018 1 Jan	2019 1 Jan	2019 9 Aug
WordPress	51.0%	55.3%	54.3%	54.8%	59.8%	60.7%	58.8%	58.5%	60.0%	59.7%	61.1%
Joomla	12.0%	10.9%	9.5%	8.7%	9.3%	8.6%	7.5%	7.2%	6.5%	5.4%	5.0%
Drupal	7.1%	6.1%	6.5%	7.2%	5.5%	5.1%	4.9%	4.8%	4.6%	3.5%	3.2%

Figure 9: Web Content Management System market share



As updated on we3techs.com (Figure 9), Wordpress is still the leader in CMS market share accounts for more than 61%. Other widely-known CMSs such as Joomla, Drupal and Shopify follow with no higher than 5% each. The reason why Wordpress dominates the market is firstly, ease of use. From installation to user interface, Wordpress users just need to drag and click, avoiding all complicated step or programming to work with their site. Additionally, Wordpress community is the biggest among others, therefore, its resources are abundant with many themes and plugins.

	Wordpress	Joomla	Drupal
Ease of use	Easiest	Easy	Moderate to Advanced
Level of user	Beginner	Beginner to Moderate	Developer
Theme	Yes	Yes	Yes
Plugins	Many options	Some options	Limited options
Security	Frequent upgrade	Frequent upgrades	Less frequent upgrade
Blog Features	Yes	Yes	Yes
SEO	Strong	Normal	Strong
Best for	Blogs, small-medium sized website	E-commerce, Social Networking sites	One size fit all

Table 2: Comparison of top CMS

In the opinions of Halk, R. and Kapoor, A. (2016), Wordpress is the easiest CMS for beginner to start with. Two authors both admit that Wordpress seem to be stand out from other CMSs with plugins and premade-themes to install effortlessly. Again, SEO is indispensable in this extremely competitive market, and Wordpress fully satisfies that factor.

With all of those reasons above, it is perfectly logical to use Wordpress as a CMS for this website project. The author already has an acceptable amount of knowledge about building website on Wordpress and thus, the project will absolutely develop faster while avoiding other potential risks cause by unfamiliarity. In addition, it is understandable that since Yoga Studio5 is a small-medium enterprise, a mid-sized website is able to meet all requirements. A simple platform like Wordpress is even very suitable for other departments in the center to update content while requires no knowledge about web programming.

### 3.3 Website layout

A website layout illustrates the overall structure of the website. Website layout is often presented by website wireframe, a visual black and white design to propose functions, structure and fundamental content of that website (Haas, 2011).

Creating a wireframe in the beginning of project brings many benefits. Developer can quickly test the overall creative strategy and usability of the website without getting bogged down in design details. A website wireframe provides a general view about the site for the client, while helping copywriters to know about their estimate amount of content with respective spaces. Working with wireframes initially between client and developer is flexible, when wireframes can be easily sketched out and as a result, modifications are always acceptable.

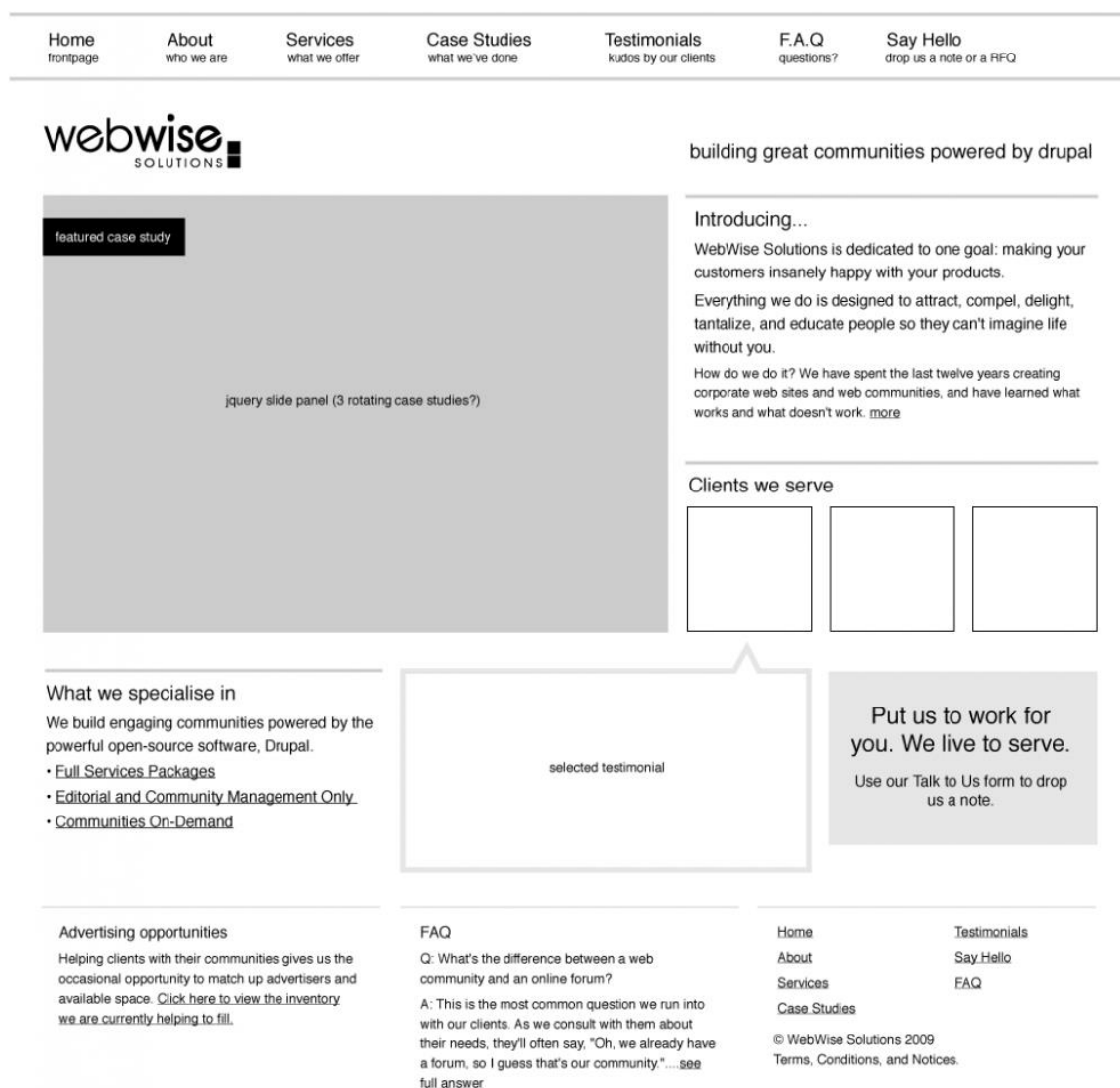


Figure 10: A sample website wireframe with some details

After creating a wireframe using basic grids, it is recommended to add some details such as texts with fonts to elucidate ideas that will be distributed on the home page (Figure 10). Since this website project is created with a ready theme choice on Wordpress, it is unnecessary to spend huge amount of time on editing wireframes with customer. However, a fairly basic wireframe is still needed to facilitate the website's features after the first meeting. Both sides will have a better understanding about the project and thus, saving redundant discussions and meetings.

### 3.4 Other elements

This section will introduce several definitions commonly used to create a working website. Basically, using Wordpress as a CMS is good enough to make a complete website, however, it is highly important to acquire fundamental knowledge about these tools in order to tackle with challenges and speeding up the project.

#### 3.4.1 HTML

HTML (Hypertext Markup Language) is the most fundamental concept about website development. It helps user to create and organize parts, paragraphs, heading, blocks and so on. A HTML document is made by HTML elements, assigned by opening and closing tags. A web browser will assume to read the content inside the HTML document and make it visual.

In Wordpress, HTML can be manually input by user, although there are other convenient options to manage and update content, such as using a plugin. While users can directly interact with content in pages via Wordpress's working panel with well-made utilities, however, understanding how HTML works to create a page or post in Wordpress is necessary to adjust everything as desired.

At the moment, according to W3C, HTML5 is the newest version of HTML with many innovative features. Some of the most awaiting functions are canvas and media elements. Developer can now design different shapes with colours or adding video, audio by using only script, for instance, JavaScript. Since Adobe Flash is not supported for a majority of mobile device and with these new elements, HTML5 provides to mobile users much better experience when going online (Casabona, 2012).

In accordance with Casabona (2012), in 2011, HTML5 was widely adopted in web development community, especially in Wordpress theme. Until now, there are tons of beautiful responsive HTML5 theme in Wordpress. A nice theme can immediately inspire positive feelings for visitors.

### 3.4.2 CSS

CSS represents for Cascading Style Sheet, a language to impose styles and decide how HTML should be displayed in a website (W3schools, 2019). CSS is configured to apply into a chosen area, for example, a HTML tag or a class. CSS can be used to apply many different pages at the same time, saving lots of time for developers.

The relationship between HTML and CSS is intimate. Without CSS, a simple HTML will only demonstrate texts without any colour or arrangement. This could be exemplified by Figure 11 below:

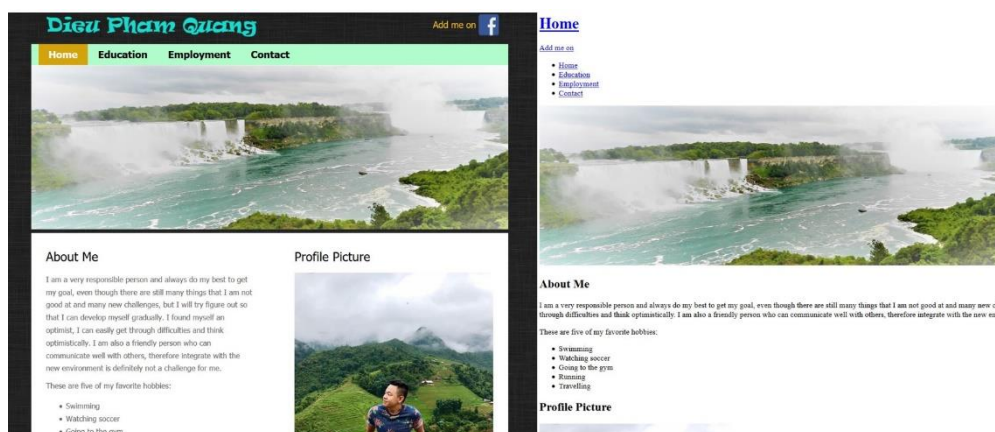


Figure 11: A simple website with CSS and without CSS

There are 3 types of CSS: internal, external and inline. An internal CSS is loaded whenever a page is refreshed, causes more time to fully display. Internal CSS is only applied to single page; however, it is easier and faster to preview that page. On the other hand, external CSS is the most commonly used style in every website. By using an independent file .css to keep all the coding for decoration, external style css can be applied to multiple pages at the same time while improving loading time effectively. Finally, inline CSS is a straightforward style that can modify a targeted area, which is sometimes very convenient to edit and preview a part without accessing to the main css external file. (HostPapa, 2017)

Understanding CSS is very important if a website needs to be outstanding and unique. There are more than a billion websites on the internet (Millforbusiness, 2019) and making visitors deeply impressive can have many competitive advantages. In this project, a built-in theme will be used to create the website due to its suitability with the demand of the project, while saving time and abating consequences that might cause by incorrect css input.

### 3.4.3 XAMPP

XAMPP is a cross-platform application to create and manage localhost on different operating system such as Windows, Linux and Mac OS. XAMPP can also be considered as a full stack

open-source webserver, with all built-in necessary tools: Apache, MySQL, phpMyAdmin and so on. Instead of installing each module individually, XAMPP uses all abovementioned tools to establish a complete webserver locally. (Ganesan, 2017)



Figure 12: XAMPP Control Panel

XAMPP interface is very clear and simple. A module when activated will turn to green mode on the left side, while user can use the right side to make actions with each module. A deeper configuration is able to be changed, although it's not recommended to modify the default setting.

#### 3.4.4 MySQL and phpMyAdmin

MySQL is a program to manage database systems. A database system is used to keep and organize data orderly. MySQL supports many programming languages, including php, an open-source scripting language to create web application running on servers. In Wordpress, MySQL is used as a default database. (Kitterhing, 2017)

phpMyAdmin is also an open-source web-based application written using php language to interact with MySQL directly via website interface instead of using command lines. phpMyAdmin is designed to simplify general tasks such as viewing a list of working databases on server, adding or editing data in table and managing user's permission (Wordpress.org). As shown in Figure 13, working with phyMyAdmin interface are much easier and faster than using common line to interact with data and tables:

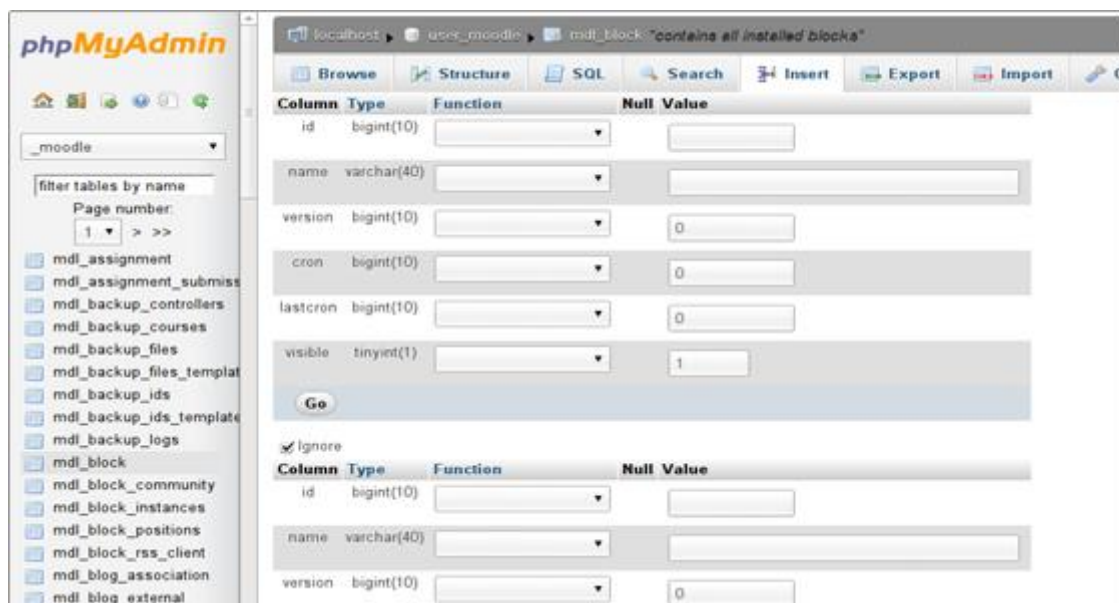


Figure 13: phpMyAdmin interface

In this project, a SQL database will be created by phpMyAdmin and linked with Wordpress folder. phpMyAdmin can export the website's database with just a click to transfer to client when the project is complete.

### 3.4.5 Adobe Illustrator and Photoshop

Adobe Illustrator and Adobe Photoshop are professional design programs belong to Adobe System. Adobe Illustrator uses algorithms, geometric objects, boundary lines, and text combinations to merge these basic shapes together to a vector object. Unlike picture, a vector object can be zoomed unlimitedly without changing its sharpness. For that reason, Adobe Illustrator is broadly used to make logo, symbols or banner. (Smith, 2018)

Adobe Photoshop is the most popular application in image industry. In 1990, after releasing the first version of Adobe Photoshop, it entirely changed the way designers and photographers work (Bark, 2012). Presently, Adobe Photoshop is still the standard leader in its field. With thousands of built-in functions and parameters, there is almost nothing that Adobe Photoshop cannot do with images, from simple color editing or cropping to replacing whole objects in the image.

In this project, the yoga center's logo will be recreated using Adobe Illustrator to mark in the pictures and use as the website's logo and favicon, while Adobe Photoshop enhances images from the client to make the website more nicely to visitors.

### 3.4.6 Search Engine Optimization (SEO)

SEO is the abbreviation of Search Engine Optimization, an optimal solution for websites to be easily searched by search engines, especially Google. According to Wikipedia, SEO is a set of methods to improve the ranking of a website in the search engine results pages. These methods include optimizing websites (impacting HTML source code and website content) and building links to pages so that search engines select the most appropriate website for Internet searchers based on specific keywords the user queries. (Wikipedia)

Nowadays, everyone uses Google to look for what they need. A SEO friendly website can appear in the first result pages whenever users make a search, while non-SEO websites tend to be on subsequent pages and usually have no click by searcher. Increasing the number of visitors to the website is always a premier goal for any website developer and builder. Furthermore, with a highly competitive market in all industries, SEO is a must for a website to primarily seize the more opportunities from visitors.

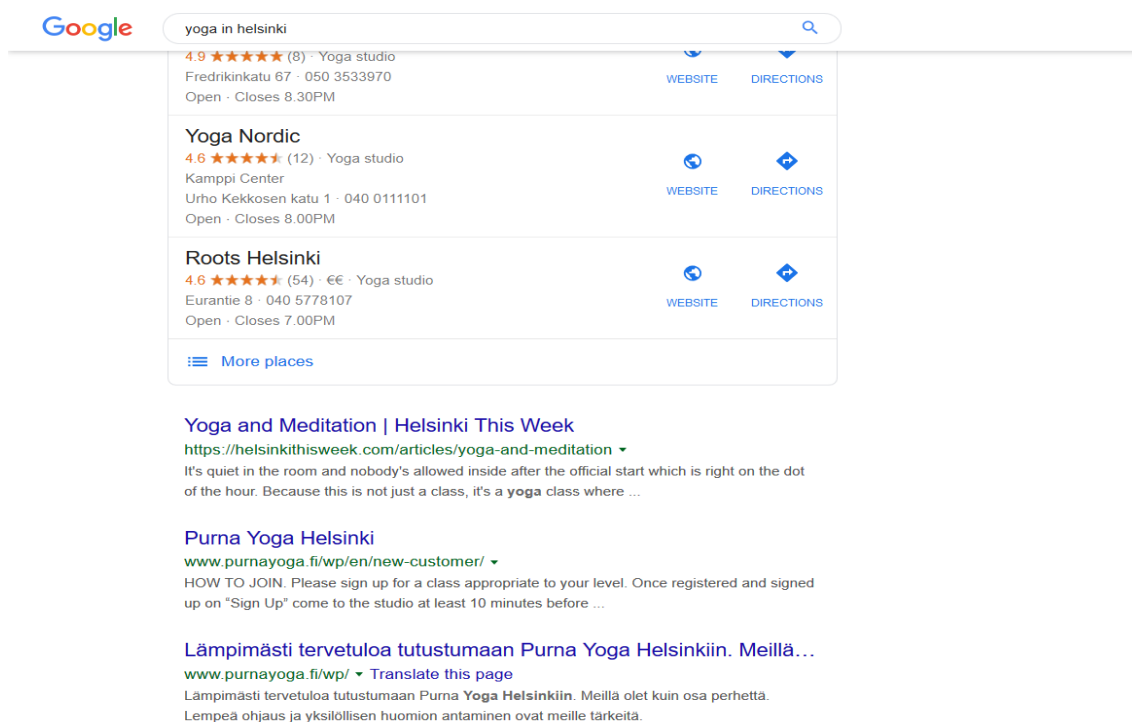


Figure 14: Google search results for key words “yoga in helsinki”

Optimizing search engines is a very complicated and advanced work for both copywriters, front-end and back-end developers, since it involves in all steps when building a website and managing its content. For example, if user makes a search with keywords “yoga in helsinki” (Figure 14), apart from ad-results that were paid to be on top, it can be seen that Helsinki This Week and Purna Yoga Helsinki are the first results appearing to searcher, which means that these websites have good SEO configuration.

## 4 Implementation

This section will present the procedure of building a website for this project. There will be quick introductions of each plugin that are installed in Wordpress platform.

### 4.1 Requirements from customer

Before moving to the sprints of developing the website, analysing requirements from the client is highly essential. The author had a chance to sitting with the team in a meeting for a while before interviewing acutely using prepared and opened questions to Tuan Bui (IT manager) and Annie Pham (deputy director). The interview was very successful with lots of information and insights collected. In addition, benchmarking was also discussed in the meeting with several sample yoga websites.

#### 4.1.1 Meeting with the client supervisor

The meeting was held in StudioFive's office room with shifted staff, deputy director and IT manager of the center. As mentioned in section 2.3, the author was able to spread out a quick survey after giving a few definitions of each function that a website should have. After that, a private discussion with the deputy director and IT manager was taken place. The questions and answers are in the appendix section of this report. Here are the main points sum up from the interview:

- 1) Result: a working website with appropriate theme that correspond with criteria of the center: clear, fresh, gentle and elegant.
- 2) Duration: as fast as possible, latest at the end of August.
- 3) Users: separated users with different permissions; the IT manager holds admin account later while other departments are limited with updating and creating content only.
- 4) CMS: Wordpress. The IT manager has more experiences with Wordpress than other CMSs, and it's easier for other departments to get use to this platform.
- 5) Expansion possibility: the website can be reduplicated or manually recreated without complexities in the future, based on documented instruction.

The conversation also indicated 5 major problems that many fitness and yoga websites usually have after publishing for a long period of time:

- 1) Poor-quality posts and information: the aim of visiting a website from customer is finding their answers for what they concern. For example, looking for opening hours on holidays, tips, event and promotions... are very realistic. Visitors can miss



important information if they don't know where to access them in a confusion of content.

- 2) Disorder structure: a visual layout website will save time searching for information for visitors and enhance user experience.
- 3) Unattractive pictures: using low-resolution pictures will make the website look unprofessionally. High quality images will deliver eye-catching feeling to visitors.
- 4) Outdated information: updating information regularly on the website is highly important. An incorrect number or address might confuse visitors and reduce trustworthiness as well as reputation of the center.
- 5) Not mobile-friendly interface: when almost everyone uses personal mobile devices daily, a website should be appeared nicely on every mobile browser.

Overall, the meeting clarified completely about vision and requirements of the website project. Other additional details were discussed via email and messenger between the author and client.

#### 4.1.2 Benchmarking - yogainvietnam.com and nomadyogahoian.com

Benchmarking is a method of identifying standards to make comparison. In a website project, benchmarking is used to measure and classify functions, productivity, structure, loading time... between websites. By doing benchmarking, the author was able to recognize advantages and disadvantages of several websites in the same industry, which helps to create a guideline for this project.

In the meeting, the author presented two websites in yoga industry; both of them are in Hoi An, Vietnam - a famous place for tourism. These websites are very well-designed mostly for foreigner and written in English, which is highly similar to the purpose of this project. After discussing, the pros and cons can be seen in table 3:

	Yogainvietnam.com	Nomadyogahoian.com
<b>Menu</b>	Very clear and unique style logo, quite small	Clear and informative
<b>Homepage</b>	Neatly designed, too much information but very attractive	Clear and concise
<b>Logo</b>	Unique	Unique

<b>Theme and colour</b>	Bright and clean	Bright and clean
<b>Font</b>	Stylish but sometimes quite small	Basic and very easy to read
<b>Structure</b>	Good structure	Clear, basic structure
<b>Other pages</b>	Highly informative and well-written content	Simple and clear, less information
<b>Mobile support</b>	Fully support	Fully support
<b>Picture</b>	High quality pictures	High quality pictures

Table 3: Benchmarking with two others yoga website

Generally, these two websites are very-well developed in Vietnamese yoga's community. Both of them are not only fully serve as informative websites but also deliver many salient characteristics of Vietnamese culture to foreign visitors. These examples can be considered as rationale standards to apply to this website project.

#### 4.2 Homepage layout

A home page represents for the whole website. For any company and organization, the homepage is always considered as the front door that approached firstly by customers. An unattractive home page can have bad effects, especially with first visitors when there is a very high chance that they will leave the site if the home page is poorly built and unreliable. Not only the visuality of a homepage is important but also the amount of information that it brings with. It is evident that no one wants to visit a blank website with no or little content or be profusely covered with tons of texts and images. A home page needs to be selective and emphasize important information, with directions guiding visitors to their desired pages.

As illustrated in Figure 15 below, the homepage layout of this website project was sketched out after the first meeting and accepted by the client. Since the website is built for a yoga organization, the priority structure is always presenting images to visitor as much as possible. Secondly, a nice and clear homepage without too much texts is more visual friendly to customer. Last but not least, a complete menu is necessary for visitor to go straight to their desired pages, while a footer with basic information about the yoga center such as address, opening hours and phone number is placed statically not only in the main homepage, but also all other pages.

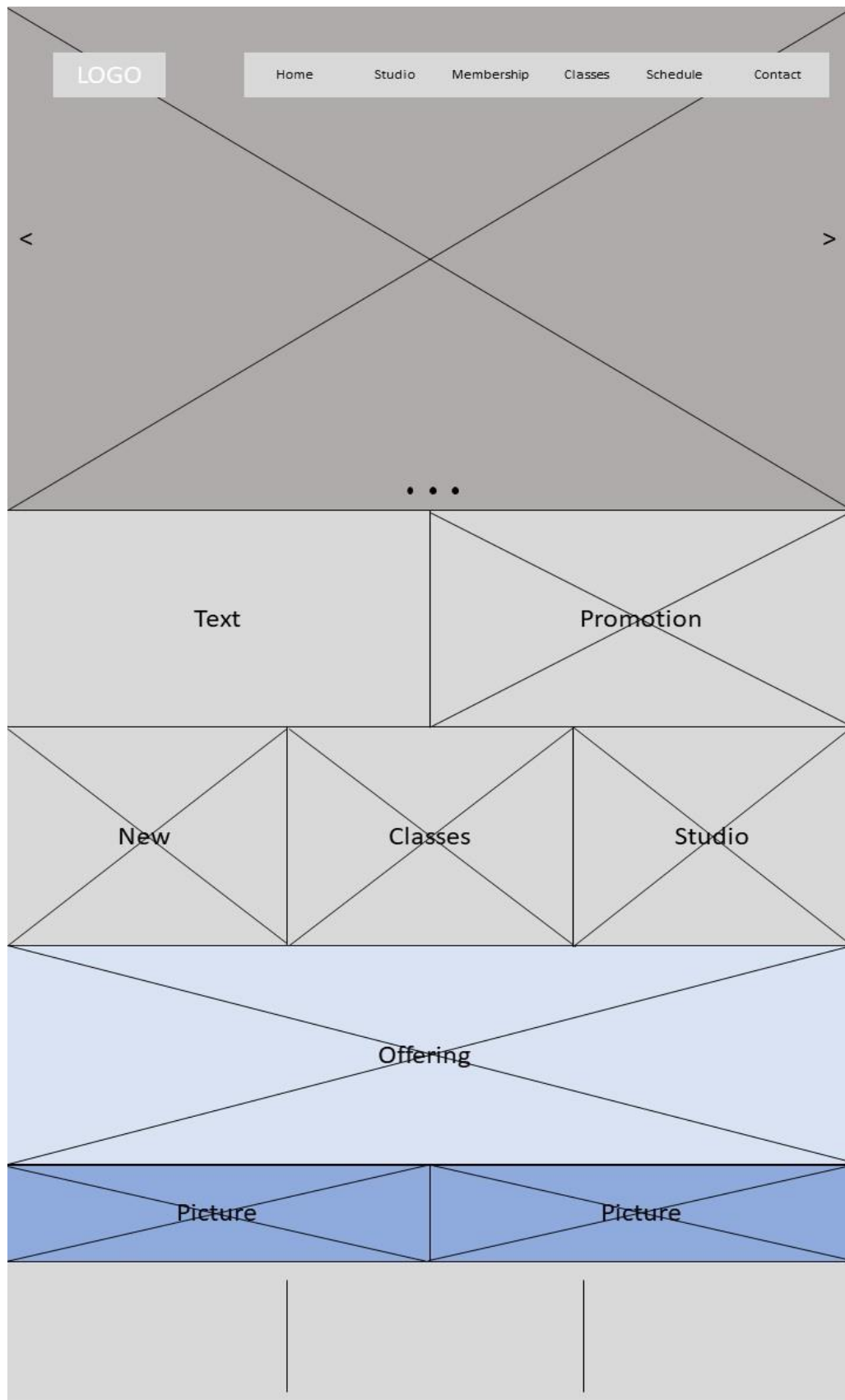


Figure 15: StudioFive's website homepage layout

### 4.3 Logo design

Logo is a graphic design of a brand for an organization. Logo is a must to advertise a brand to the market. Usually, logo is created uniquely for a brand so that an organization can be identified immediately among other competitors. A logo normally consists symbol, text or a combination of both. (Johnson, 2014)

In this project, a logo was already created by the company to append in the studio reception desk, classroom and some posters. However, the author still made a rework to the yoga center's logo to fit in the website requirements. By using Adobe Illustrator, the logo can be separated into two parts: symbol and text. This way will provide a flexibility to apply and modify the logo appropriately depends on each different circumstance.

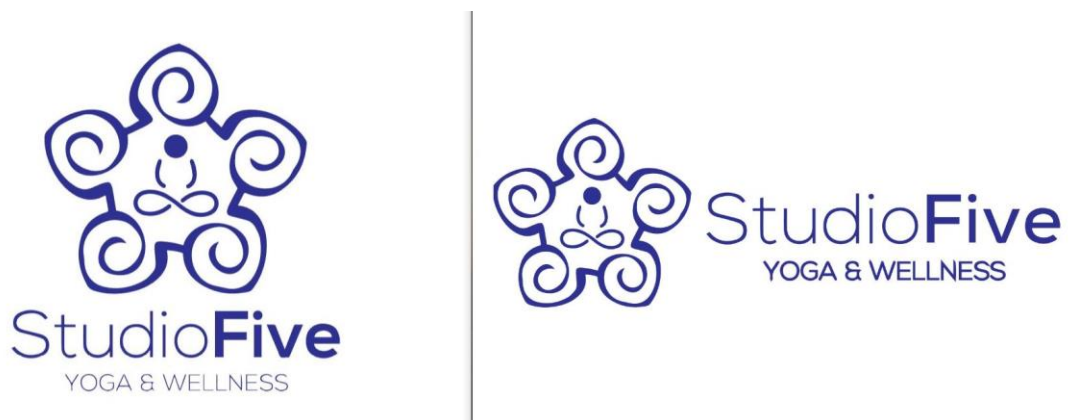


Figure 16: Yoga Studio5's logo

### 4.4 Setting up local environment

When it comes to website development, it is always recommended to establish a local environment for deploying and testing so that developer can conveniently build the website without worrying about internet connection or hosting service (McFedries, 2018). As presented in section 3.4.3, using XAMPP is a perfect solution to set up a local environment. After downloading and installing a compatible XAMPP version based on the using operating system, starting "Apache" and "MySQL" in XAMPP Control Panel, as illustrated in Figure 12. Once a local host is complete, phpMyAdmin dashboard (Figure 13) can be accessed by typing "localhost/phpmyadmin" in a browser's address bar.

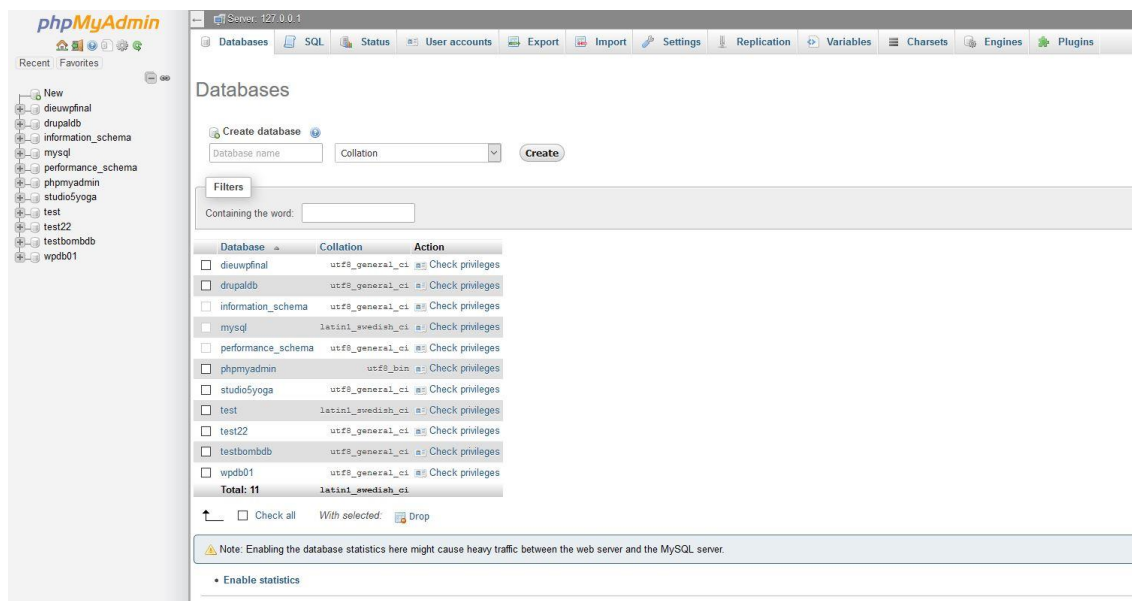


Figure 17: Creating database in phpMyAdmin

A new database can be created in the tab “Databases” by entering a database name, choosing collation then click “Create”. A list of databases will be displayed on the left column or in the tab “Database”. (Figure 17)

#### 4.5 Wordpress installation

A zip file contains all necessary components of Wordpress can be downloaded in “Wordpress.org”. After extracting the zip file, a folder named “wordpress” will come up and should be renamed due to the name of the project. By doing this, it will differentiate each project if there are other developing websites in a same computer. Then, user can copy or move the re-named folder to “C:\xampp\htdocs” or depending on the place where XAMPP is installed. In this project, the author named the folder as “studio5yoga”.

Once the website folder is in “htdocs”, it is important to properly link the created database with the new wordpress folder. After opening the copied folder, a list of built-in components will show up (Figure 18). To connect the created database with the new folder, open “wp-config-sample” with a text editor application, for example, Notepad or Notepad++. Enter the created database name in the line “define( ‘DB\_NAME’, ‘database\_name\_here’ );”, username with “root” and leave blank for the database password (Figure 19). After all, save the configuration file as a new file named “wp-config.php” in the exact same folder.

studio5yoga				
Name	Date modified	Type	Size	
wp-admin	18-Jun-19 17:50	File folder		
wp-content	18-Jun-19 17:50	File folder		
wp-includes	18-Jun-19 17:50	File folder		
index	30-Nov-17 23:11	PHP File	1 KB	
license	01-Jan-19 20:37	Text Document	20 KB	
readme	08-Apr-19 22:59	HTML File	8 KB	
wp-activate	12-Jan-19 06:41	PHP File	7 KB	
wp-blog-header	30-Nov-17 23:11	PHP File	1 KB	
wp-comments-post	21-Jan-19 01:34	PHP File	3 KB	
wp-config-sample	08-Jan-19 04:30	PHP File	3 KB	
wp-cron	09-Jan-19 08:37	PHP File	4 KB	
wp-links-opml	16-Jan-19 05:29	PHP File	3 KB	
wp-load	30-Nov-17 23:11	PHP File	4 KB	
wp-login	10-Jun-19 13:34	PHP File	39 KB	
wp-mail	30-Nov-17 23:11	PHP File	9 KB	
wp-settings	28-Mar-19 19:04	PHP File	19 KB	
wp-signup	16-Jan-19 16:51	PHP File	31 KB	
wp-trackback	30-Nov-17 23:11	PHP File	5 KB	
xmlrpc	17-Aug-18 01:51	PHP File	3 KB	

Figure 18: Wordpress main folder of this project

```

1  <?php
2  /**
3   * The base configuration for WordPress
4   *
5   * The wp-config.php creation script uses this file during the
6   * installation. You don't have to use the web site, you can
7   * copy this file to "wp-config.php" and fill in the values.
8   *
9   * This file contains the following configurations:
10  *
11  * * MySQL settings
12  * * Secret keys
13  * * Database table prefix
14  * * ABSPATH
15  *
16  * @link https://codex.wordpress.org/Editing_wp-config.php
17  *
18  * @package WordPress
19  */
20
21  /** MySQL settings - You can get this info from your web host */
22  /** The name of the database for WordPress */
23  define( 'DB_NAME', 'studio5yoga' );
24
25  /** MySQL database username */
26  define( 'DB_USER', 'root' );
27
28  /** MySQL database password */
29  define( 'DB_PASSWORD', '' );
30
31  /** MySQL hostname */
32  define( 'DB_HOST', 'localhost' );
33
34  /** Database charset to use in creating database tables. */
35  define( 'DB_CHARSET', 'utf8' );
36
37  /** The Database Collate type. Don't change this if in doubt. */
38  define( 'DB_COLLATE', '' );

```

Figure 19: Linking database with new Wordpress main folder

In a browser, type “localhost/name\_of\_the\_folder” to be automatically redirected to the newly created Wordpress folder. After that, a page with Wordpress logo and choosing language for installation shows up, which means that the connection between database and wordpress folder is successful (Figure 20).

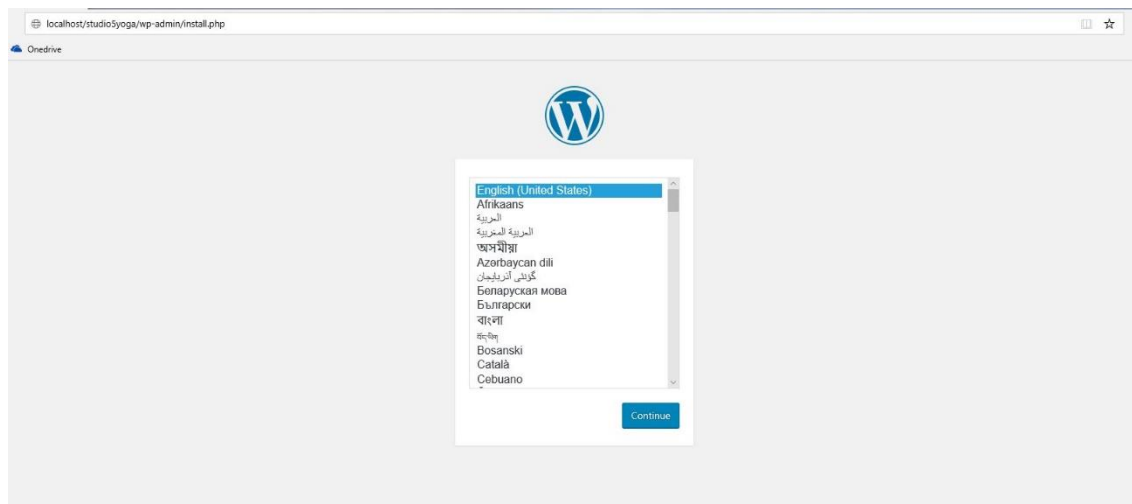


Figure 20: Wordpress installation page

Figure 21: Basic information of the website

After choosing a suitable language and continue, the next page will collect several basic information of the site, as shown in Figure 21. A site title is the name of the website, which helps visitor know about what website they are surfing. Username and password are used to create an account for accessing the Wordpress website via Wordpress dashboard. When the installation is finished, Wordpress will indicate a confirmation page and following that, user can log-in using the button in that page or typing in a browser as “localhost/name\_of\_the\_folder/wp-login.php” and log in with username and password that were created previously. Once user is able to log in into the website, the main dashboard of Wordpress is shown up and the actual website will be developed through this interface (Figure 22).

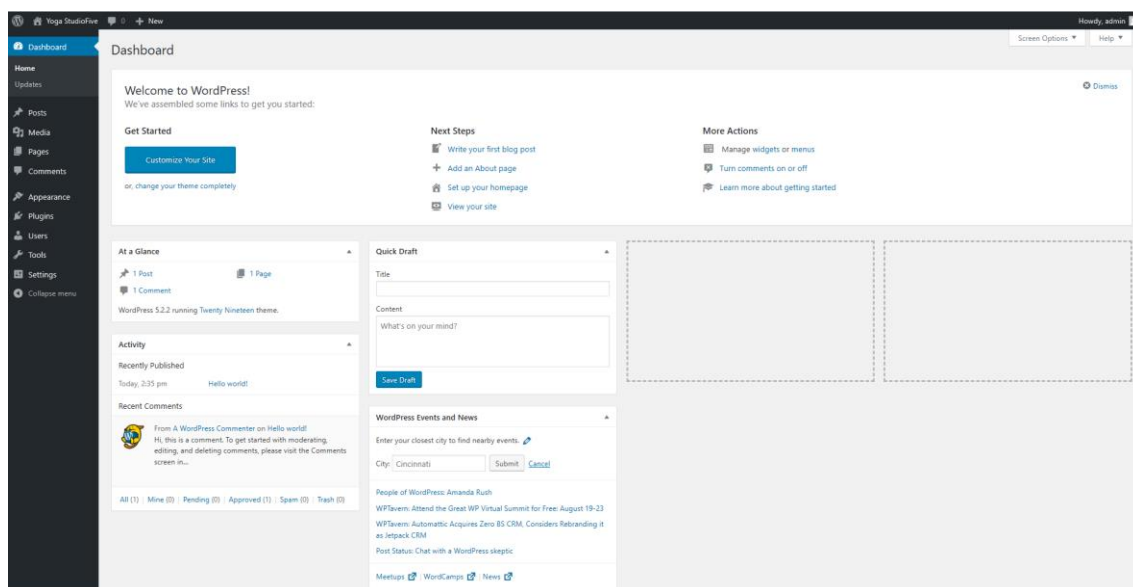


Figure 22: Wordpress main dashboard

#### 4.6 Choosing theme for the project

Choosing an appropriate theme for a website seems to be a very considerate determination because it can be considered as “the soul” of the website. For instance, a sporty website cannot be only black and white without any enthusiastic colourful content; or an educational website should not be decorated with graffiti images or gaudy theme. Besides, a good theme choice is not only suitable for the characteristic of the website but also present the uniqueness of that website from others in a same field.

In this project, the final decision with all agreements from the IT manager, deputy director and the author is using Enfold built-in theme. Enfold was developed by Kriesi, a team was founded in 2006 by blogger Christian Budschedl. Until now, the team has 8 people, with more than 35 demos and hundred thousand of customer. (Kiresi.at)



The first benefit of using Enfold theme in Wordpress is convenience. With more than 35 demos ranging from different purposes such as newspaper, blog, education, clinic, gym and health studio and so on, users just need to choose a right demo for their project and develop their content. (Figure 23)

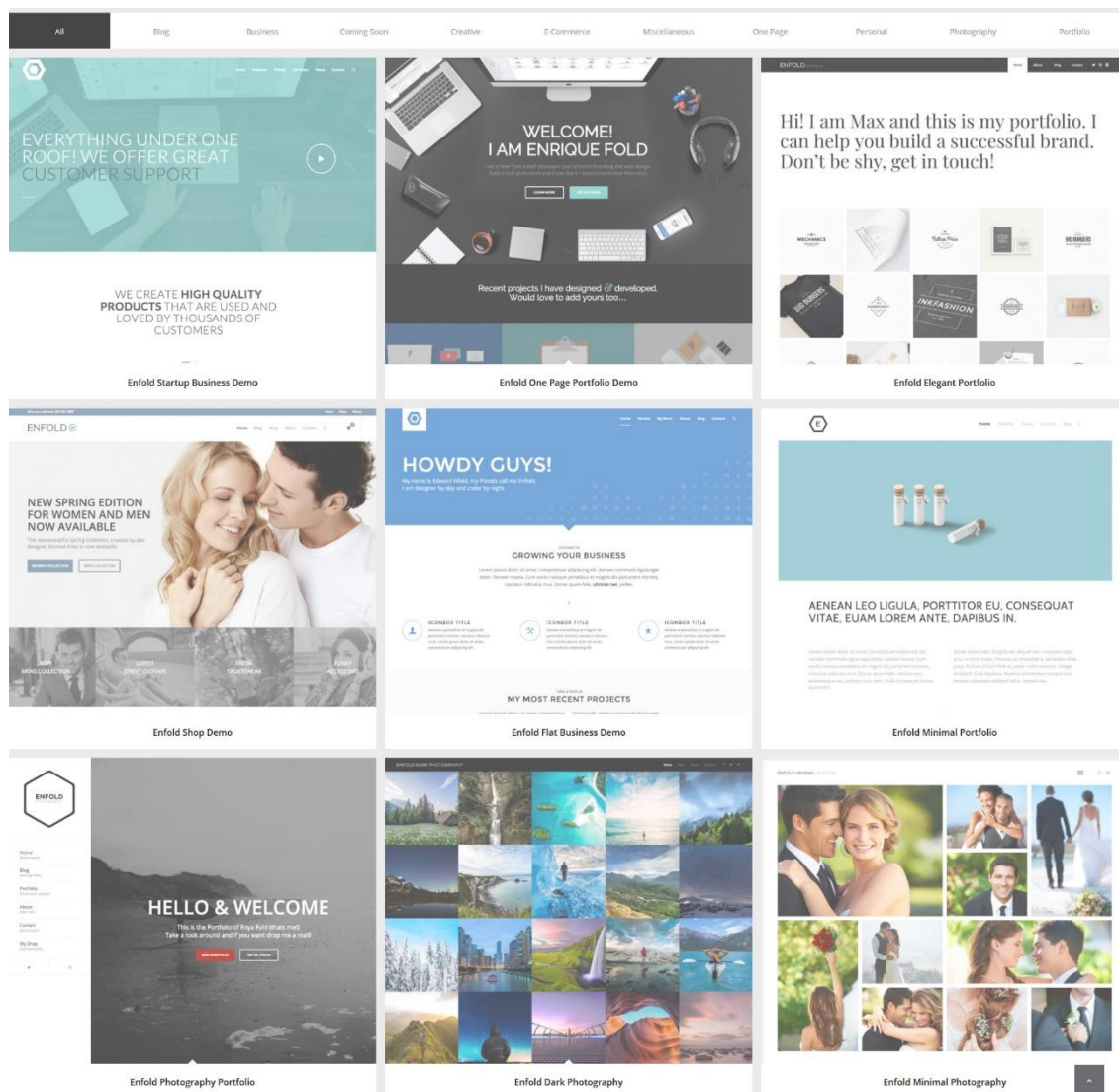


Figure 23: Enfold demos

Secondly, Enfold provides users a super useful and simple working environment called “Avia Layout Builder”. By separating a page into parts, users only need to drag and drop elements based on their needs and after that, users can change, arrange, modify or even duplicate elements. This will save a huge amount of time compared to traditional coding (Figure 24). In addition, Enfold has its own configuration panel which allows users to be creative and manually design as they want (Figure 25).

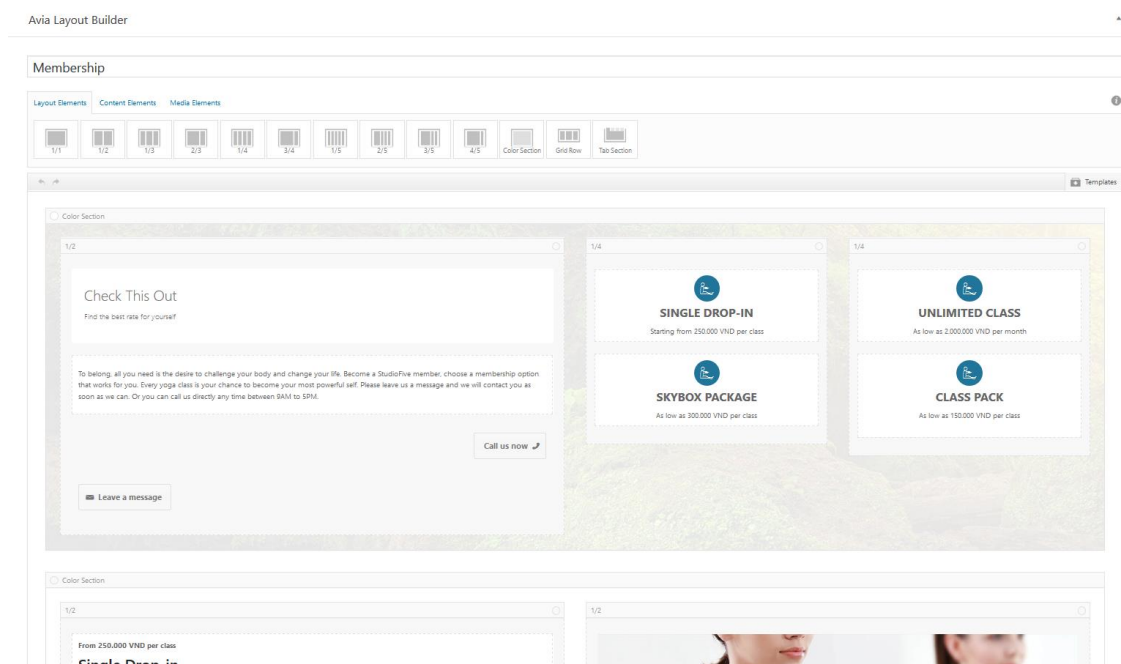


Figure 24: Enfold Avia Layout Builder


Enfold Theme Options		Save all changes
<b>Theme Options</b>		
General Layout		
General Styling		
Advanced Styling		
Main Menu		
Header		
Sidebar Settings		
Footer		
Layout Builder		
Blog Layout		
Social Profiles		
Performance		
Privacy and Cookies		
Newsletter		
Google Services		
Demo Import		
Import/Export		
Theme Update		
	<b>Frontpage Settings</b> Home   <p>Select which page to display on your Frontpage. If left blank the Blog will be displayed</p>	
	<b>And where do you want to display the Blog?</b> Select page   <p>Select which page to display as your Blog Page. If left blank no blog will be displayed</p>	
	<b>Logo</b> <input type="text" value="http://localhost/studio5yoga/wp-content/"/> <p>Upload a logo image, or enter the URL or ID of an image if it's already uploaded. The themes default logo gets applied if the input field is left blank.</p>  <p>Logo Dimension: 340px * 156px (if your logo is larger you might need to change the Header size in your <a href="#">Header Settings</a>)</p>	
	<b>Favicon</b> <input type="text"/> <p>Specify a favicon for your site. Accepted formats: .ico, .png, .gif</p> <p>What is a <a href="#">favicon?</a></p>	
	<b>Page Preloading</b> <input type="checkbox"/> Show a preloader when opening a page on your site.	
	<b>Lightbox Modal Window</b> <input checked="" type="checkbox"/> Check to enable the default lightbox that opens once you click a link to an image. Uncheck only if you want to use your own modal window plugin	
	<b>Custom Error 404 Page</b> No custom 404 page selected   <p>Select if you want to use any of your pages as your custom Error 404 Page. This page will be excluded from page lists and search results. You must deselect the page to make it accessible for public again.</p>	

Figure 25: Enfold configuration panel

Finally, all Enfold premade themes are completely responsive and mobile friendly. This can be seen as the most expecting feature of this theme, when the author doesn't need to dig deeply into coding or designing to make all content appear perfectly on mobile. Overall, this theme choice totally fulfils the requirements of this project, although there are some small parts that need to be coded by hand for better magnificence.

#### 4.7 Plugins Installation

One of the reasons why Wordpress is so largely used in web development industry is due to its plugin supports. With thousands of plugins by many different developers, Wordpress users always have a great community to provide them almost whatsoever functions they need for their websites. There are several plugins using in this website project to enhance user experience and effectiveness of the website, from development to maintenance.

##### 4.7.1 Duplicate page

Duplicate page is a very useful plugin for Wordpress to clone exactly a post or page in the website. Users don't need to manually copy and paste content into a new page if they want to duplicate a chosen page. In this website project, there are many pages that have similar content and structure; therefore, this plugin helps to create content of the site much faster.

##### 4.7.2 Yoast SEO

Yoast SEO is a built-in powerful plugin of Wordpress to optimize elements in a page, post or article. Yoast SEO also supports users to install many other web management applications such as google analytics and sitemap. This tool was built and developed by Yoast team, with two versions: paid and free. While a paid version even brings more features to the website, a free version has all important functions. (Skrba, 2017)

As exactly by its name, Yoast SEO is very useful to manage and measure parameters on the web that are important to search engines. As a result, a page, post or even the whole website will be able to appear more frequently to search engines. Yoast SEO is used in this project to firstly, improving posts and articles of the website for better user experience and in the long-term, having a higher rank in search result when people look for a yoga center.

Yoast SEO

SEO Readability Social

**Focus keyphrase** ?

yoga

Snippet Preview

**Yoga StudioFive Hanoi - Starting your first yoga journey**  
localhost/studio5yoga/home/ ▼

Busy of your working life? In **Yoga StudioFive**, you can start finding yourself in the freshest environment of our studio. Contact us now!

📱 🖥️ ✎ Edit snippet

SEO title ➕ Insert snippet variable

Yoga StudioFive Hanoi - Starting your first yoga journey

Slug

home

Meta description ➕ Insert snippet variable

Busy of your working life? In Yoga StudioFive, you can start finding yourself in the freshest environment of our studio. Contact us now!

Close snippet editor

Figure 26: SEO snippet preview

SEO analysis  
yoga

[+ Add synonyms](#)  
[+ Add related keyphrase](#)

Did you know Yoast SEO Premium also analyzes the different word forms of your keyphrase, like plurals and past tenses? [Go Premium!](#)

**Analysis results**

^ Problems (6)

- **Outbound links:** No outbound links appear in this page. [Add some!](#)
- **Internal links:** No internal links appear in this page. [make sure to add some!](#)
- **Keyphrase in introduction:** Your keyphrase or its synonyms do not appear in the first paragraph. [Make sure the topic is clear immediately.](#)
- **Single title:** H1s should only be used as your main title. Find all H1s in your text that aren't your main title and [change them to a lower heading level!](#)
- **Image alt attributes:** No images appear on this page. [Add some!](#)
- **Text length:** The text contains 224 words. This is below the recommended minimum of 300 words. [Add more content.](#)

^ Improvements (1)

- **Keyphrase in slug:** (Part of) your keyphrase does not appear in the slug. [Change that!](#)

^ Good results (8)

- **Keyphrase length:** Good job!
- **Keyphrase density:** The focus keyphrase was found 4 times. This is great!
- **Keyphrase in meta description:** Keyphrase or synonym appear in the meta description. Well done!
- **Meta description length:** Well done!
- **Previously used keyphrase:** You've not used this keyphrase before, very good.
- **Keyphrase in subheading:** Your higher-level subheading reflects the topic of your copy. Good job!
- **Keyphrase in title:** The exact match of the keyphrase appears at the beginning of the SEO title. Good job!
- **SEO title width:** Good job!

Figure 27: Yoast SEO analysis

After a very simple installation and activation via Wordpress plugin finder, Yoast SEO can be found in the bottom section of a page or post in Wordpress dashboard. There are two main parts in Yoast SEO: SEO score and Readability scores. As can be seen in Figure 26, a snippet preview shows how the website will be appeared on the search engine result page. To enhance SEO score of a webpage, Yoast SEO helps user to focus on 4 things:

- Focus key phrase: the keyword of the page or post is placed here so that Yoast SEO can evaluate the density of that keyword in the page, title and meta description.
- SEO title: An SEO title is displayed in search engines.
- Slug: This part can modify the end of the link of the page or post so that the search engines and searchers can easily recognize what the page or post is about.
- Meta description: This is the overall description of a page or post in search engine result page. By using meta description of Yoast SEO, developer can manually customize the content showed to searchers. A good meta description provides a whole content to customer and attracts them to visit the page.

Once configured, Yoast SEO will highlight good points and weaknesses that need to be improved in SEO analysis table by green, red and orange dot (Figure 27). Hence, users can have a general view about current SEO status of their website.

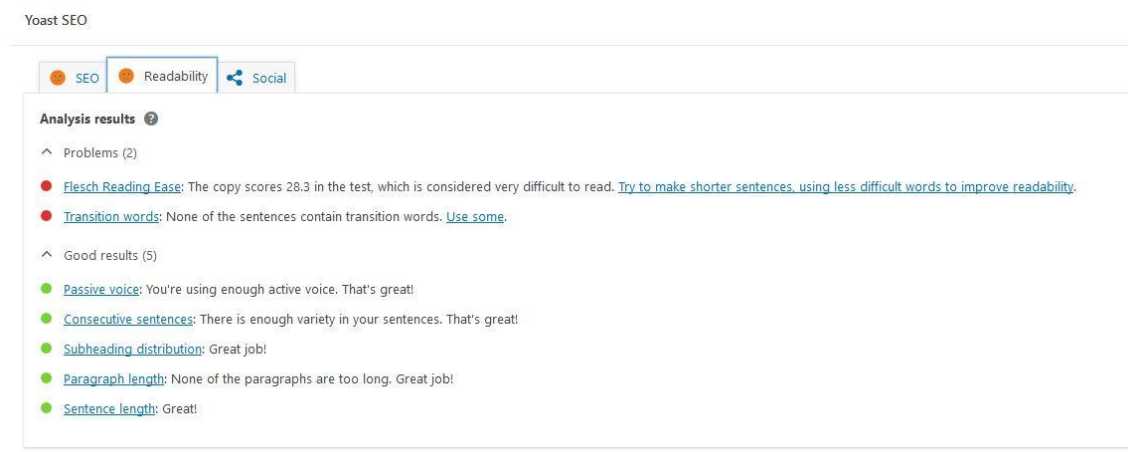


Figure 28: Yoast SEO Readability analysis

Readability score is used to estimate how readable the content in a page or a post is (Toonen, 2019). With Yoast SEO, readability analysis guides user how to write a better content in their page or post based on some criteria like the number of words in a sentence, the use of transition word, length of a paragraph, so on (Figure 28). The easier the content that visitors can read, the more visits it might have and overall, a higher rank in search engines.

### 4.7.3 Google Analytics

The term “Web analytic” is more and more common nowadays. Web analytic is the process of measuring, collecting, analysing and reporting web flow and statistic to research and optimize website usability. Additionally, web analytic is widely used as a tool to conduct market and business research, therefore, making evaluation and enhancing the efficiency of website to company and organization (Hughes, 2019).

Google analytic is one of the most popular tools to analyse website, developed by Google Inc. With this tool, analysts, website reviewers and SEOs will be able to guide and evaluate the overall status of their website. Google Analytics is synthesized and statistically reported directly by Google search engine, using the system of bots detecting and scanning websites, so it often brings high accuracy for users. In addition, Google Analytics provides lots of information from generals to details such as webpage views, time on site, bounce rate, response rate... on every small page of the website. This tool can also filter virtual views and evaluate websites on the actual visit of users, which provides an even more accurate result to users.

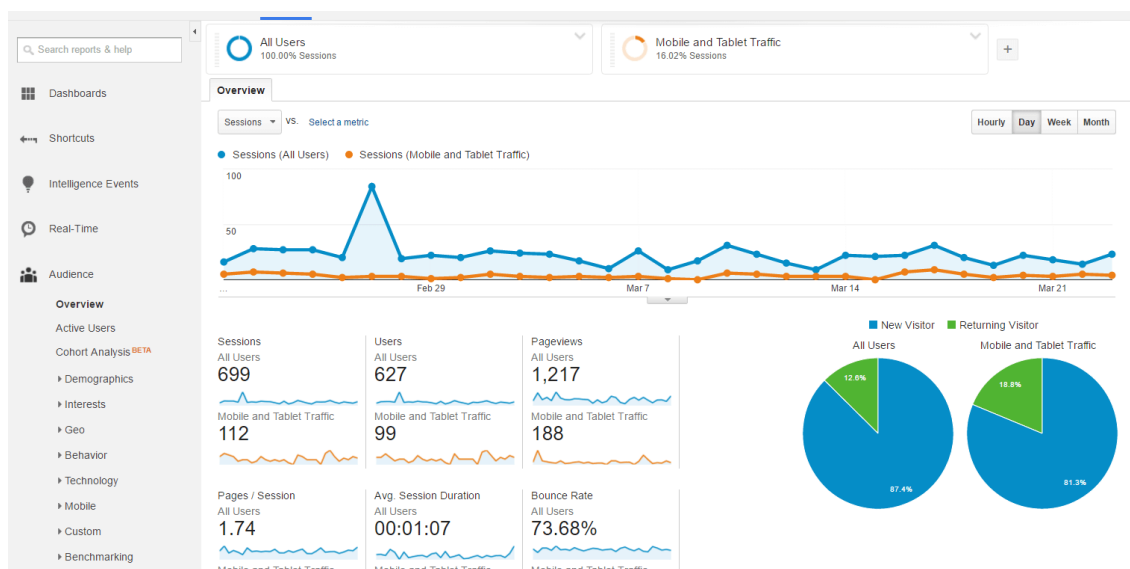


Figure 29: Sample Google Analytic dashboard

After registering a Google Analytic account and use a tracking code to merge the website with this tool, users will be able to view basic statistics in main dashboard, as can be seen in Figure 29. Real-time shows the exact number of visitors are visiting the website; while other statistics present different characteristics of visitors, for example, what devices they are using to visit the website, where are they from, how long did they stay in a webpage and so on.

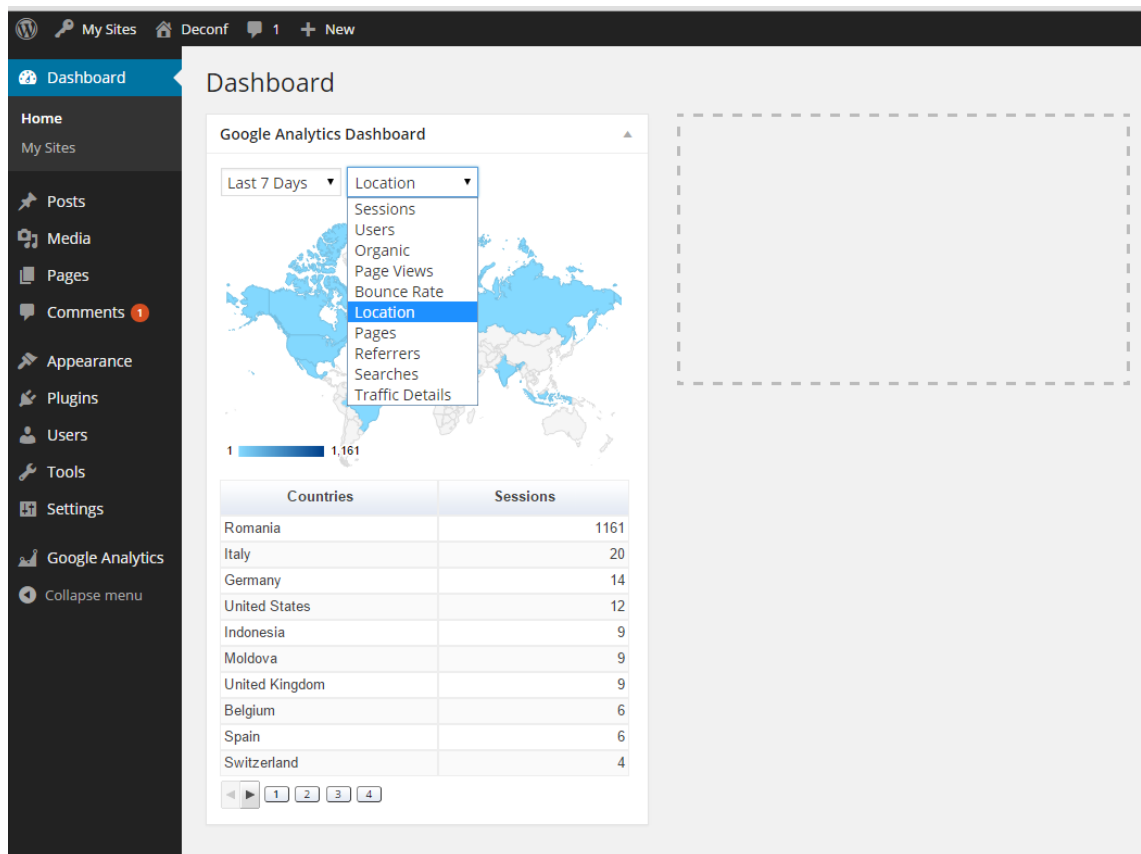


Figure 30: Google Analytics Dashboard for WP (GADWP)

In this project, although Google Analytics is not currently worked due to local deployment, a plugin was still installed in advance through Wordpress plugins page to support Google Analytics, named Google Analytics Dashboard for WP, by ExactMetrics. Wordpress users now can see their statistics right through Wordpress dashboard (Figure 30). Since Google Analytics is highly beneficial for Sales and Marketing departments to measure effectiveness of their campaigns for the yoga center, once the site go online, the author agrees to provide an instruction on setting up Google Analytics on the new site.

## 5 Testing and packing

Testing is the penultimate stage in a SDLC. Without testing, bugs and errors can present in the project that might affect to the final product and user experience. In this website project, the testing phase is performed locally to check basic but important functions of the website such as: linking between pages, images and logo, information and visual content. Another important factor in the testing is responsive design, when it can be considered as a must in any mobile device's browser.



Overall, the website operates properly with all links and pages in their places. All images are displayed nicely and completely. Introduction video of the center and all buttons function without any errors. Menu, header and footer are shown up accurately in all pages.

### 5.1 Responsive design

As mentioned in section 4.6, Enfold theme is used in this website project and it provides fully mobile interface for users. During the development, responsive design is always tested in each page. Figure 31 can show as an example how this website should be displayed in an iPhone with the screen resolution is 1,334 x 750 pixels.

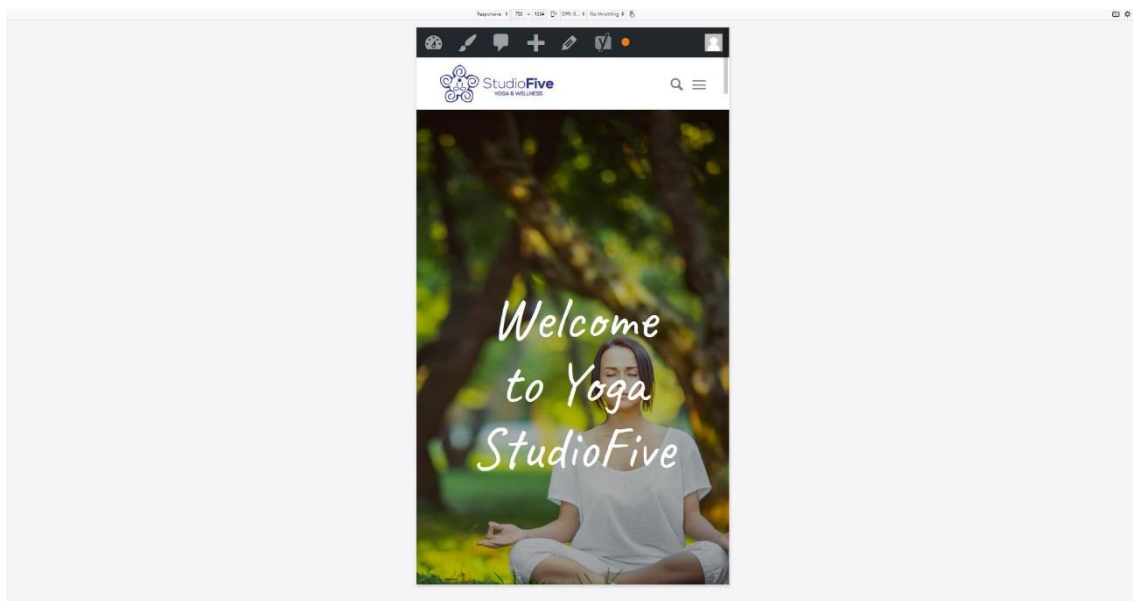


Figure 31: Responsive design of the website

It can be seen that the title, picture, logo and menu are placed properly in the view from a mobile's browser. Other pages also delivered full content and pictures as desktop interface after being rechecked.

### 5.2 Security

While security concern is commonly more important in bigger website project or in a famous and popular brand and organization, however, a plugin to support the site from outside attacks is still useful to protect the content. Furthermore, when the website is grown bigger and be popular, security is very important in any competitive market.

Wordfence is now the best and most widely used plugin about security in Wordpress. The reason why Wordfence is trusted by many users is because of its functions to reduce many popular attacks such as Local Hack, XSS, SQL Injection and so on. It also provides 2 factor-



authentication to login and malicious auto-scanning. Wordfence dashboard is clearly organized with tools, current security issues of the website or firewall management.

### 5.3 Packing

Finally, the newest version of the whole website is packed and transferred to the client. There are two ways to fully transfer the website in case the other solution might not work. The main folder of the website in “htdocs” (Figure 18) will be zipped and sent with the database. The database of the website can be exported in phpMyAdmin to a file with extension “.sql”. The client can import the database and main folder to similar place to access the website.

The second way to export the whole website is using All-in-One WP Migration plugin. This plugin offers a very simple solution to migrate the whole website just by one click. The website can be imported back by using the same plugin after installing a new Wordpress as instructions above.

The client received the website without any problem and all the functions of the website works properly.

## 6 Collecting feedbacks

After transferring the website, the author was able to collect some feedbacks from the client based on a small questionnaire given to the employee of the center. Some members of the yoga center were also participated.

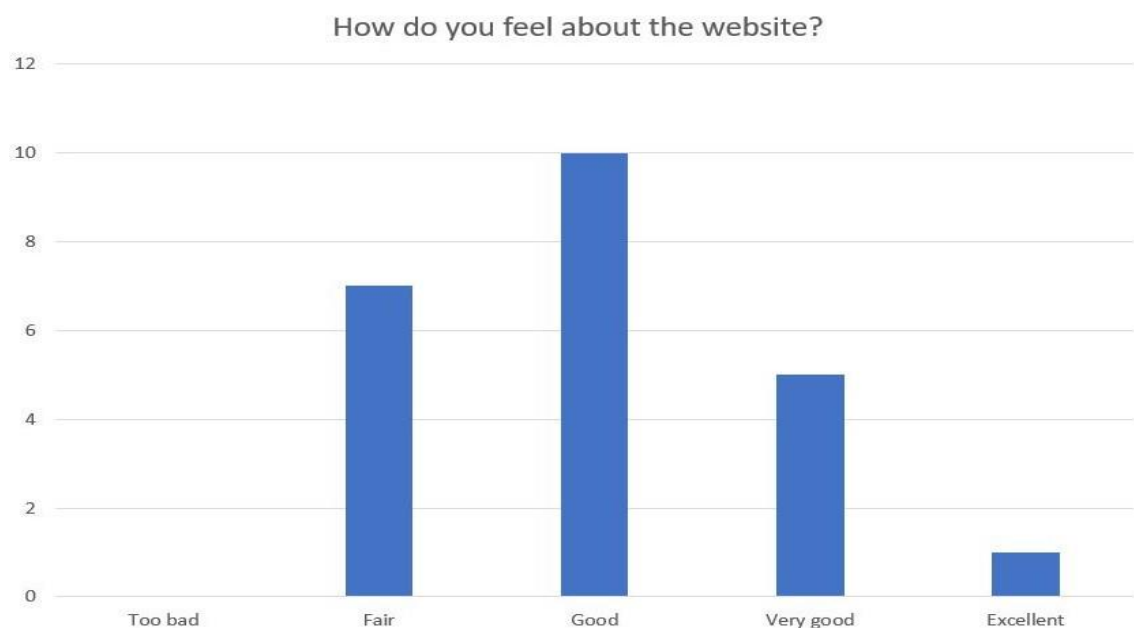


Figure 32: Survey result

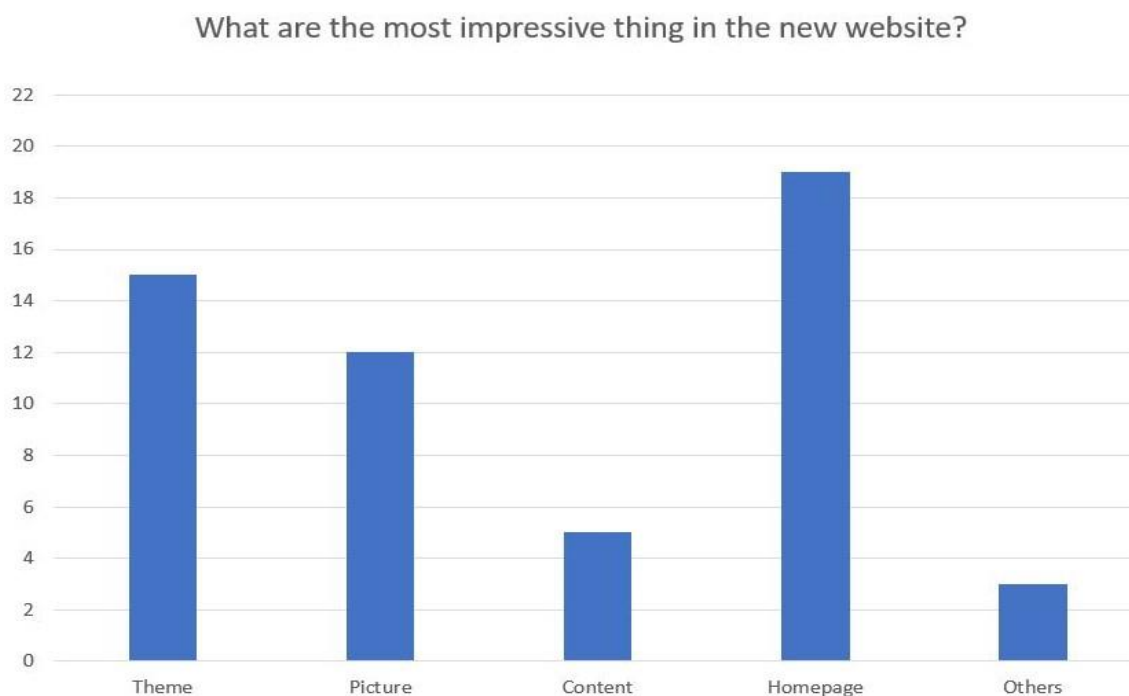


Figure 33: Survey result

As can be seen in Figure 32, the website receives some positive feelings from participants. However, although the homepage and the theme was in favour the most (Figure 33), the content of the website was not attractive to most of the participant and therefore, it has to be improved to bring more value and information to users.

There are also some others verbal comments about the quality of pictures on the website. This problem can be solved by professional photographer retaking the pictures of the studio. In general, the website meets the expectations of the client from the beginning.

## 7 Conclusion

In conclusion, the project was successful with the satisfaction from the client. The website was delivered punctually, along with drafts of this thesis to provide a general view about all stages of the development, plugins and other measurements. The website meets all the expectations from the IT manager as well as the deputy director of the yoga center. Although there exists some small disadvantages that can be improved gradually such as content, overall, the yoga center brings many supports to the author to complete the project as agreement. All meetings, discussions and data importantly contribute to the direction and success of this project.

From personal perspective, this project gives author a huge challenge to overcome. Since this is the first personal project of the author, there were several struggling times that the project might go to a wrong direction without the supports of the client. Secondly, this project

can be considered as a full test on the ability of writing, researching, communicating, problem solving and as a result, the author gains a significant knowledge and experiences of these competences. Overall, based on the collected feedbacks, it is very promising that the website can be an effective channel for the marketing campaigns of the yoga center when being published and therefore, making the center's business more and more successful with new customers.

## References

### Printed sources

Bark, S. 2012. An introduction to Adobe Photoshop.

Dawson, C. 2009. Introduction to Research Methods: a practical guide for anyone undertaking a research project.

Dawson, C. 2011. Projects in Computing and Information Systems: a guide for students.

Jones, K. & Farrington, P. 2011. Using WordPress as a Library Content Management System.

McFedries, P. 2018. Web Coding & Development All-in-One For Dummies

### Electronic sources

Blue Fountain Media. 2019. Last modified 04 May 2019. Developing an Effective Strategy for Your Web Project. Accessed 15 July 2019.  
<https://www.awwwards.com/developing-an-effective-strategy-for-your-web-project.html>

Casabona, J. 2012. The Rise of HTML5 in WordPress. Accessed 30 July 2019.  
<https://code.tutsplus.com/articles/the-rise-of-html5-in-wordpress--wp-23750>

Craig, W. Agile Web Development That Works. Article from WebFX Blog. Accessed 15 July 2019.  
<https://www.webfx.com/blog/web-design/agile/>

Fair, J. 2012. Agile versus Waterfall: approach is right for my ERP project? Accessed 15 July 2019.  
<https://www.pmi.org/learning/library/agile-versus-waterfall-approach-erp-project-6300>

Fitness Marketing: 11 Strategies on How to Market Your Gym. 2018. Accessed 12 July 2019.  
<https://www.perfectgym.com/en/blog/club-owners/fitness-marketing-how-to-market-your-gym>

Ganesan, P. 2017. What is XAMPP? WPBlogX. Accessed 30 July 2019.  
<https://www.wpblox.com/what-is-xampp/>

Hawk, R. 2016. Wordpress, Joomla, And Drupal: A comparison. Accessed 30 July 2019.  
<https://www.webii.net/blog/2016/09/wordpress-joomla-drupal-comparison/>

How Many Websites Are There Around the World? 2019. Last modified 02 February 2019. Accessed 30 July 2019.  
<https://www.millforbusiness.com/how-many-websites-are-there/>

Hughes, J. 2019. What is Web Analytic? Accessed 30 July 2019.  
<https://themeisle.com/blog/what-is-web-analytics/>

Johnson, J. 2014. The importance of a logo for your business. Why do you need one? Article from rocketspark. Accessed 30 July 2019.  
<https://www.rocketspark.com/blog/importance-logo-your-business-why-do-you-need-one/>

Kapoor, A. 2016. Top Comparison Among Top Three CMS Platforms Wordpress, Joomla, Drupal. Accessed 30 July 2019.  
<http://cms-website-development-services.blogspot.com/2016/11/content-management-system-is-revolution.html>

Kittherhing, J. 2017. MySQL and WordPress: Understanding How Databases Work. Accessed 30 July 2019.  
<https://premium.wpmudev.org/blog/mysql-databases/>

Lotz, M. 2018. Waterfall vs. Agile: Which is the Right Development Methodology for Your Project? Article from Seguetech. Accessed 15 July 2019.  
<https://www.seguetech.com/waterfall-vs-agile-methodology/>

Market share yearly trends for content management systems. 2019. Accessed 09 August 2019.  
[https://w3techs.com/technologies/history\\_overview/content\\_management/ms/y](https://w3techs.com/technologies/history_overview/content_management/ms/y)

Prljic, M. 2014. Carrying Out Successful Research for a Web Project. Article from envatotuts+. Accessed 15 July 2019.  
<https://webdesign.tutsplus.com/articles/carrying-out-successful-research-for-a-web-project-cms-20828>

Search engine optimization. Last modified 27 September 2019. Accessed 30 July 2019.  
[https://en.wikipedia.org/wiki/Search\\_engine\\_optimization](https://en.wikipedia.org/wiki/Search_engine_optimization)

Segue Technologies. 2015. 8 Benefits of Agile Software Development. Accessed 15 July 2019.  
<https://www.seguetech.com/8-benefits-of-agile-software-development/>

Skrba, A. 2017. Last modified 29 November 2018. Yoast SEO Plugin Overview. Accessed 30 July 2019.  
<https://firstsiteguide.com/yoast-seo-plugin-overview/>

Smith, J. 2018. What is Adobe Illustrator. Accessed 30 July 2019.  
<https://www.agitraining.com/adobe/illustrator/classes/what-is-adobe-illustrator>

Son, M. 2019. Last modified 19 June 2019. Fitness industry grows as Vietnam becomes body conscious. Article from VNExpress. Accessed 15 July 2019.  
<https://e.vnexpress.net/news/business/industries/fitness-industry-grows-as-vietnam-becomes-body-conscious-3940603.html>

Streuli, S. 2017. Last modified 03 October 2017. The benefits of a content management system. Article on Zivtech. Accessed 15 July 2019.  
<https://www.zivtech.com/blog/benefits-content-management-system>

Swerky, D. 2018. Last modified 2019. The SDLC: 7 phases, popular models, benefits & more. Article from raygun. Accessed 15 July 2019.  
<https://raygun.com/blog/software-development-life-cycle/>

Toonen, E. 2019. How to use the readability analysis. Accessed 30 July 2019.  
<https://yoast.com/yoast-seo-readability-analysis/>

Understanding external, internal, and inline CSS styles. 2017. Accessed 30 July 2019.  
<https://www.hostpapa.ca/knowledgebase/understanding-external-internal-inline-css-styles/>

Vietnamese health consciousness and fitness demand survey. 2017. Accessed 10 July 2019.  
<https://qandme.net/en/report/Vietnamese-health-consciousness-and-fitness-demand.html>

Waterfall model. 2019. Last modified 30 August 2019. Accessed 15 July 2019.  
[https://en.wikipedia.org/wiki/Waterfall\\_model](https://en.wikipedia.org/wiki/Waterfall_model)

What is phpMyAdmin? Article from Wordpress.org. Accessed on 30 July 2019.  
<https://wordpress.org/support/article/phpmyadmin/>

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## Appendix 1: Interview with client

Below is the interview details with the client in the first meeting. The interview was in Vietnamese, and it was documented and translated into English in this thesis.

Author	Client
<b>1. What is our center's current situation and why do you want to develop a website?</b>	<p>Our yoga center has now officially opened for a while and therefore, we do have a number of loyal customers that are staying with us for quite a long time. They are also our great resource when a majority of new comers are referred by them. However, we do really want to expand faster and be more competitive with other popular yoga centers. A website is needed to present our professionalism on business card, social networks, flyers and poster. I can see that other centers do have a website to post their information and events and in fact, they attract quite a lot of new customers on their event's day.</p>
<b>2. When should you need the website?</b>	<p>We expect to have a working website as soon as better, however, not later than September since we are planning several events and marketing campaigns.</p>
<b>3. Is there anything related to cost and budget that I need to pay attention to?</b>	<p>At the moment, our IT manager, Tuan Bui, already owns a few sites. He can provide you supports as you need. You don't need to care about choosing hosting, he will contact the providers and take care of that. If there is any fee need to pay for the project, contact us first. Compensation? Enjoy our voucher to join us anytime you come back.</p>
<b>4. What CMS do you want to use? Who will update the content of the website?</b>	<p>As you mentioned and as I heard about Tuan, Wordpress is definitely a good choice. Our employee in Marketing and Sales department will keep the content up-to-date. They are</p>

	not really experienced in IT so please keep the working platform as simple as you can.
<b>5. What is your expectations about the website?</b>	Obviously, a nice feeling whenever looking in the website. The contents need to be clear, rich and easy to follow. The design and theme of the website should be similar to the characteristics of our yoga center: peaceful, fresh and elegant. In the long-term, we should be able to have more new members per month, more classes per week. We know that it highly depends on our marketing campaign, but a new website for our center should contribute into our success. If the website is good, we can consider it as our main website to build some more website since we are also planning to open more places. There are some sites that were poorly designed since they just need to post some texts as information, and so I really hope to have a much better visual website.
<b>6. Is there any special feature that you want to be installed in the website?</b>	It depends on your ability and experience. In general, it can be considered as a good point, but not our priority. Our active members are mainly women and what they were really asking for a website is a nice schedule that can be seen easily on their mobiles. Along with that, pictures of our studio, opening time, introduction and so on should also be included clearly as basic functions of a website. In case you can find any simple tracking add-on for the site, it's always welcome. Since our staff will update the content while Tuan will manage all of them, they should have different accounts with different access to the website.

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Thank you for your time answering my interview questions.

You are welcome. Please feel free to ask us if you need any information or have any new idea.